GERMANY'S PUSH FOR WORLD CHEMICAL MARTS

Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

December 5, 1960

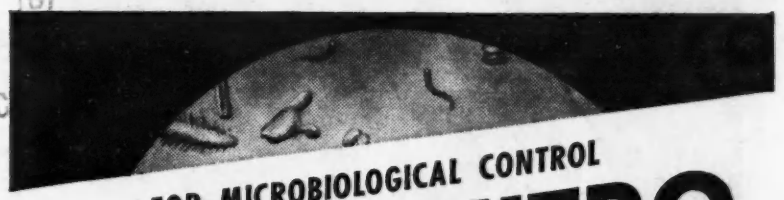
OPD REPORTS FROM EUROPE
PAGE FIVE

Baker
AMMONIUM CHLORIDE,
U.S.P., Granular and Powder

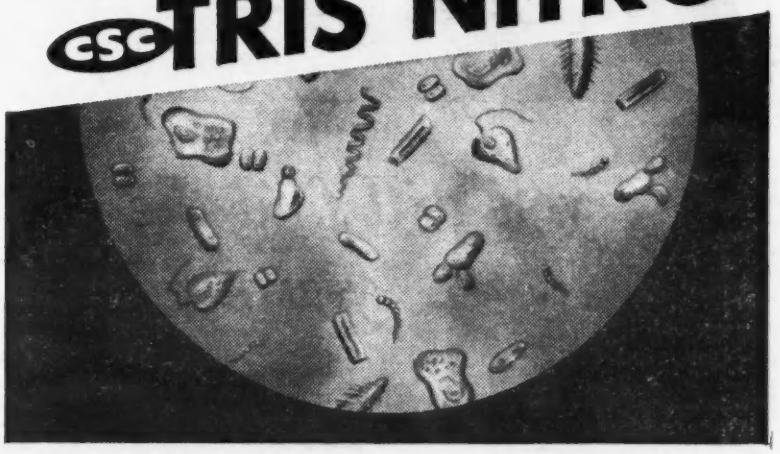
J.T.Baker
J. T. BAKER CHEMICAL CO.
PHILLIPSBURG, N. J.
New York • Chicago • Philadelphia • Las Angeles

Pennsalt
DITHIOCARBAMATES
Zinc Dimethyl-, Zinc Diethyl-, Zinc Dibutyl-, Zinc Diamyl-,
Selenium Diethyl-, Sodium Dimethyl-,
Potassium Dimethyldithiocarbamate
Industrial Chemicals Division
PENNSALT CHEMICALS CORPORATION
3 Penn Center, Philadelphia 2, Pa.
Pennsalt Chemicals
ESTABLISHED 1850

CARBIDE'S
Primary Amyl Acetate
UNION CARBIDE
CHEMICALS COMPANY
DIVISION OF UNION CARBIDE CORPORATION
270 Park Avenue, New York 17, New York



FOR MICROBIOLOGICAL CONTROL
CSC TRIS NITRO



Investigate Tris(hydroxymethyl)nitromethane! Inhibits growth of bacterial flora in cutting oils. Dramatically checks unwanted microbiological growth in aqueous systems. Effective in protecting recirculating water systems, cooling towers, and oil well flooding operations. Prevents deterioration of non-protein sizing and adhesive solutions during storage.

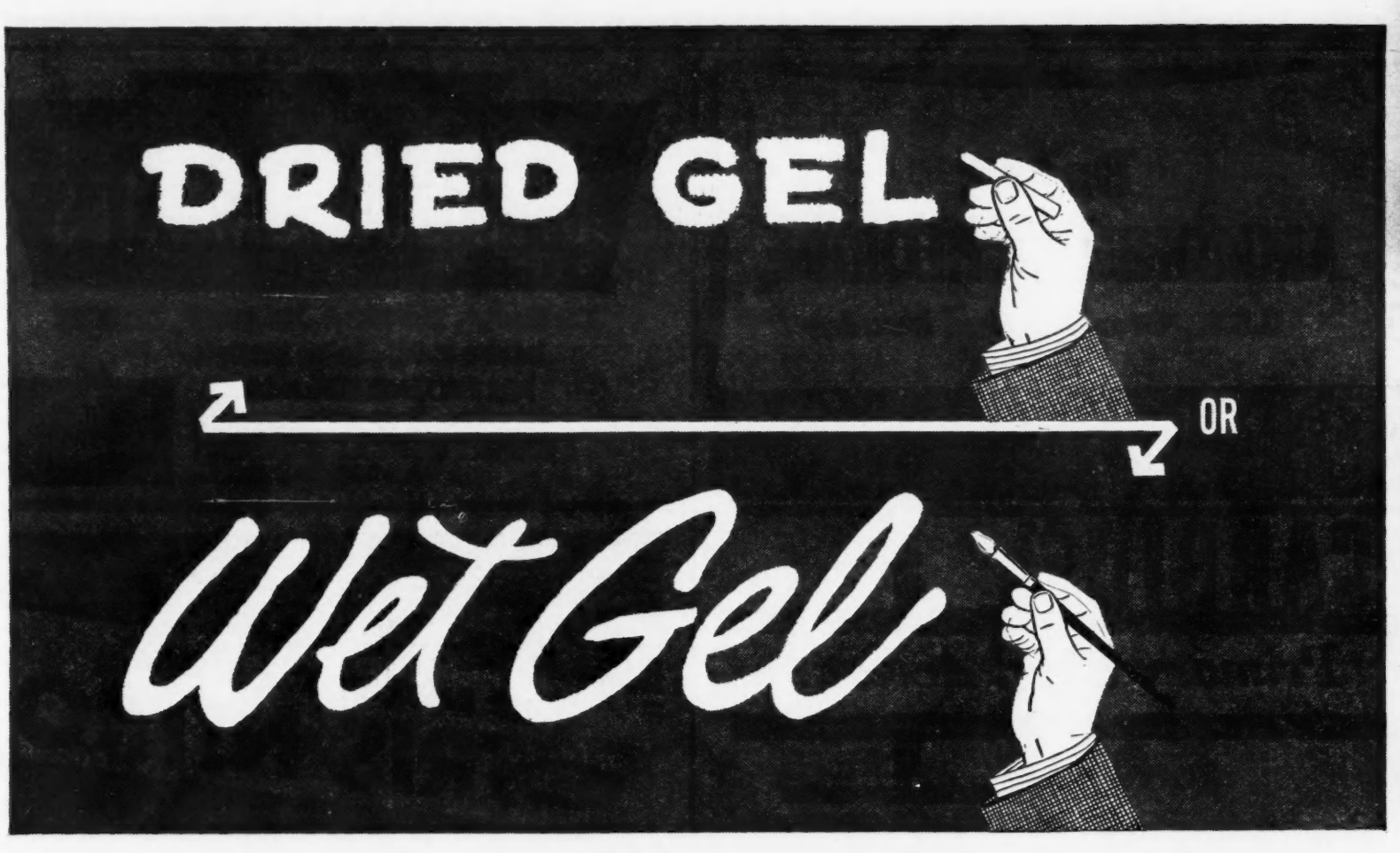
PROPERTIES	TRIS NITRO $(CH_2OH)_3CNO_2$
Molecular Weight	151.12
Melting Point °C, approx.	175-176
pH of 0.1M Aqueous Solution at 20°C	4.5
Solubility in water, g/100 ml at 20°C	220
Very soluble in alcohols, sparingly soluble in hydrocarbons	

DISCOVER THE NITROPARAFFINS
COMMERCIAL SOLVENTS CORPORATION
CSC
260 Madison Avenue, New York 16, New York • Offices in Principal Cities

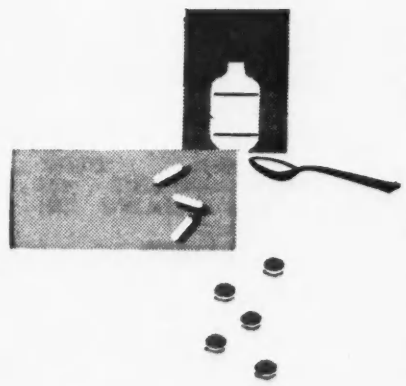
HIGH QUALITY
SODIUM SULPHATE
PRIOR CHEMICAL CORPORATION
420 LEXINGTON AVENUE
NEW YORK 17, N. Y.
CABLE: PRIORCHEM NEW YORK
PHONE: LExington 2-9811

BORIC ACID
For prompt delivery, get it from ... U.S. BORAX
630 SHATTO PLACE, LOS ANGELES 5, CALIFORNIA
Distributors Conveniently Located in All Principal Cities

ALUMINUM HYDROXIDE



you will find the ALUMINUM HYDROXIDE *you need at* J.T.Baker



Whether you use a DRIED GEL or a WET GEL, you will find at J. T. Baker the Aluminum Hydroxide best suited to your pharmaceutical formulation, and your equipment. Baker offers you five forms—3 dried, 2 wet—each of unsurpassed quality, and each possessing specific processing advantages.

DRIED GELS, *ideal for tablets and powders*

1. *Dried Gel, Free-Flowing, Medium Powder*—Meets U.S.P. specifications. Is white, tasteless, non-sticky. Baker's special process assures a completely amorphous Aluminum Hydroxide with high activity and acid-consuming capacity (min. 250 ml. 0.1 *N* HCl per gm.). Provides a bulk density (19-21 lbs./cu. ft. tapped-constant vol.) which is optimum for many formulation needs. Mixes readily, flows freely with minimum dusting.

2. *Dried Gel, Medium Powder*—A physically modified, fine particle size, dried gel with little dusting tendency and having different wetting characteristics for certain granulations. Affords a bulk density of 13-18 lbs./cu. ft. Meets all U.S.P. requirements for activity and chemical purity.

3. *Dried Gel, Dense Powder*—Developed to help you formulate a smaller tablet or capsule of higher potency. This Dried Gel is 50% more dense than other forms offered by J. T. Baker and meets U.S.P. requirements. Mixes readily and flows freely with minimum dusting.

CONCENTRATED WET GELS, *ideal for liquid formulations (actual Al_2O_3 content reported on label)*

1. *Type 300* offers excellent stability in 4% formulations corresponding to Aluminum Hydroxide, U.S.P. Gel. It is also useful for antacid liquid formulations that do not contain bulky additives. Type 300 pours easily, undergoes little or no separation on standing either before or after reconstitution. On dilution, provides suspensions of reproducible viscosity.

2. *Type 150*—A thinner wet gel than Type 300. Recommended when a more pourable gel with higher Al_2O_3 content is required, or for formulations containing magnesium trisilicate or other bulky solids.

Other important antacid materials offered by Baker include Magnesium Trisilicate, U.S.P., Magnesium Carbonate, U.S.P., Bismuth Subcarbonate, U.S.P., and Bismuth Subnitrate, N.F.

May we send you Product Data Sheets on J. T. Baker Aluminum Hydroxide dried and wet gels?
Do you have specific questions about their use in your formulation?
May we send you samples for your evaluation? Write—

J.T.Baker CHEMICAL

J. T. Baker Chemical Co.
Phillipsburg, New Jersey

MOVES UP:
and chief ex
tion, Boston
D. Cabot, w

Grace For B

W. R. Gr
a major e
duction. W
ing packa
to double
Baton Rou
chemicals
line of poly
Also incl
of low and
to the divis
Today's
an increas
abreast, th
to add faci
mers of a
lar archite
ments in
blow moldi
Polystyre
Grace's
Cosden Pe
Spring, Te
is now und
slate inclu
pose moldi
as medium
In a rela
reports th
"Grex" po
duced to
Industrial
latter's Ho
will be ma
Grace. Sp
from 0.912
0.3 to 70.0.

ACTH Is a Ma

Universit
by Dr. Kla
the frontie
further by
tropis hor
three amin
The ACT
in medicin
amino aci
Lederle La
can Cyanar
each specif
from what
three acids
Dr. Hof
synthesis f
work just
by a team
of Californ

Male

Heyden
—whose 2
N. J., is du
—isn't ove
pending ov
Forecasts
faze us, S
New York
the New Yo
last week.
It's figu
maleic will
1961. Dem
four or fiv
pound mar

Oil, Paint and Drug Reporter

Vol. 178 No. 24 30 Church St., New York 7, N. Y. December 5, 1960

MOVES UP: Louis W. Cabot, chosen president and chief executive officer of Cabot Corporation, Boston. He succeeds his father, Thomas D. Cabot, who has become chairman.

Grace Has Blueprint For Big Plastics Push

W. R. Grace & Co. has made plans for a major expansion of its plastics production. With an eye on the fast-growing packaging business, Grace intends to double polyethylene capacity at the Baton Rouge, La., unit of its polymer chemicals division and add a complete line of polystyrene resins.

Also included in the scheme is addition of low and medium density polyethylenes to the division's present high-density line.

Today's farbicating technology demands an increasingly exact product. To keep abreast, the New York company intends to add facilities that will turn out "polymers of a more closely controlled molecular architecture to meet recent advancements in fabricating technology, such as blow molding and vacuum forming."

Polystyrene is already produced by Grace's recently-acquired subsidiary, Cosden Petroleum Corporation, at Big Spring, Tex., where a capacity expansion is now under way. The plant's production slate includes high-clarity, general purpose molding and extrusion resins as well as medium and high impact formulations.

In a related development, the company reports that low and medium density "Grex" polyethylene resins will be produced to Grace specifications by U. S. Industrial Chemicals Company at the latter's Houston, Tex., plant. The resins will be made from ethylene supplied by Grace. Specifications are for a density from 0.912 to 0.933 and melt indices from 0.3 to 70.0.

ACTH Synthesis in Lab Is a Major Breakthrough

University of Pittsburgh scientists, led by Dr. Klaus Hofmann, have pushed back the frontiers of protein chemistry a bit further by synthesizing adrenocorticotropis hormone (ACTH) out of twenty-three amino acids.

The ACTH molecule, as it is now used in medicine, contains thirty-nine different amino acids. But Dr. Paul Bell of Lederle Laboratories, division of American Cyanamid Company, has shown that each specific ACTH molecule, no matter from what animal source, has only twenty-three acids in common.

Dr. Hofmann's team worked on the synthesis for seven years at Pitt. Their work just beat out development reported by a team of researchers at the University of California, who reported November 22

—*Continued on page 37*

Food Additive Law's Future: Maybe Time Extension Is Due, Maybe Committee of Experts

Food & Drug Administration has a recommendation for congress: extension of the effective date of the food additives law for a limited number of commodities beyond the March 6 deadline when the law is to become fully effective. At the same time, congress will be asked by the chemical industry to amend the law to provide for a panel of scientific experts, as recommended in the Kistiakowsky report, to aid FDA in administering the Delaney anti-cancer clause.

FDA's recommendations for extending the law, of course, depends upon getting the okay of the incoming Kennedy administration for such a step. No one anticipates any difficulty on this score, however.

Success Hinges on FDA Attitude

Success of industry's move to amend the law to establish the expert panel hinges in large measure on FDA's attitude towards such a proposal. On this, officials are making no commitments at this time, but they seem inclined to go along with the general idea.

These two legislative developments of immediate importance to the chemical industry highlighted last week's joint national conference in Washington of FDA and the Food Law Institute to discuss food additives, color additives, and other unresolved problems under the federal food, drug and cosmetic act. Among other matters touched upon at the conference were these:

- Hazardous Labeling Law. FDA is currently recruiting a staff to work on hazardous substances and conferring with industry on the general regulations to be issued under the law. Industry expressed the hope that the regulations would be sufficiently flexible to recognize the work of proper labeling already done by private industry in this field.
- FD&C Red No. 1. Drug producers who have been using this color in their drug formulations and must now discontinue its use because of FDA's finding that the color is unsafe (OPD, 11/21/60) will have to file formal application with FDA to amend their new drug applications in order to comply with the FDA order.
- Food Additives. Producers or users of food additives should not hold off filing a petition for clearance of an additive to be sure they have complete data on every possible use of his additive.

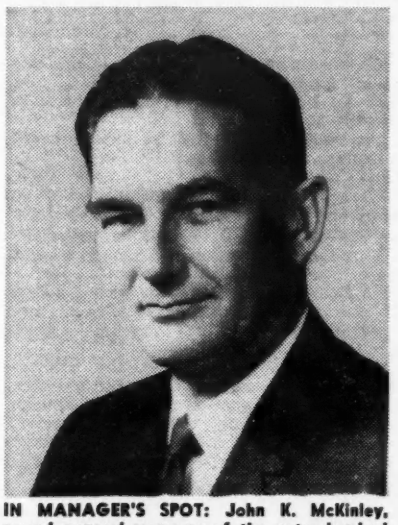
Consideration should be given to early submission of a petition for the items on

—*Continued on page 58*

Syntex Reaches Agreement To Market in French Areas

Syntex Corporation, New York, a major producer of steroid hormones, will market its hormone specialty products in France and other French marketing areas for the first time under an agreement with Les Laboratoires Cassenne, of Paris, an affiliate of Roussel Corporation.

Under the terms of the agreement, Cassenne will distribute Syntex pharmaceuticals under the "Syntex" label in France, Algeria, Tunisia, Morocco, Viet Nam and other Asian and African areas in the French zone of influence. Cassenne expects to begin distributing the products during the first half of 1961.



IN MANAGER'S SPOT: John K. McKinley, named general manager of the petrochemical department of Texaco, Inc., New York.

McKesson Will Buy Two Firms in Arizona

McKesson & Robbins, Inc., New York, has made arrangements to expand its chemical department through acquisition of all assets owned by Western Chemical Company and Western Chlorine Company, both of Arizona.

An agreement signed last week by the three firms is expected to become final December 15. The purchase includes chemical distribution facilities of Western Chemical at Phoenix and Tucson and a chemical repacking plant of Western Chlorine at Tolleson.

With addition of these units, McKesson's chemical distribution network will now include fifty-one branches. Service in the Arizona area, described as a fast-growing chemical market, will thereby be improved.

McKesson's chemical department functions as nationwide distributor of some 1,000 heavy and fine chemicals and feed supplements.

Freeport Starts Production At Gulf Coast Sulfur Mine

Freeport Sulphur Company has started operations at a new sulfur mine on the Gulf of Mexico. The unit is located about sixty miles southwest of New Orleans at Lake Pelto on the marshland shore of the Gulf.

To mine the deposit, Freeport is using what it terms a unique barge-mounted

—*Continued on page 43*

Safrol, Sassafras Make Their Exit, Substitutes Enter

Root beer is dead! Long live root beer! That sums up the situation this week in the soft drink and flavoring industries. The government has just acted against further use of safrol or oil of sassafras in the popular American beverage.

But root beer will live on—with anise oil, licorice, oil of sweet birch and oil of wintergreen as substitute flavorings.

Everyone Saw It Coming

Root beer makers and the suppliers of flavorings saw the situation coming, and the switch to substitutes had been largely made by last week when Food & Drug Administration finally clamped down on the flavorings for food and beverage use.

Consumers reportedly are finding no complaints in the substitute materials. The finished products taste just as good and the essential oils industry is happy.

Sassafras oil, which figures chiefly in beverages, candies and chewing gums, will just about disappear from the market, say some experts.

Safrol, which makes up about 80 percent of sassafras oil, is also going to be hurt, but it has another use: an inexpensive masking agent.

By formal order of FDA, safrol and oil of sassafras may no longer be used because laboratory evidence indicates they are "weak hepatic carcinogens."

Previous approvals of the use of these flavorings have been withdrawn and the full effect of the Delaney clause of the food additives law is being applied against them immediately.

FDA also announced last week that it is conducting tests of two other flavoring agents—dihydrosafrol and isosafrol, which are closely related to safrol. They have been found to have some toxicity, although they have not been found to be carcinogenic, FDA said.

Approval of the use of these substances in foods and beverages is also being withdrawn until further studies show that a safe tolerance level for them can be established.

The beverage industry, which has been the chief consumer of these four flavorings for years, had begun discontinuing their use in 1959 when they heard the safety of them being questioned. By

—*Continued on page 55*

Allied Stockholders Okay Their Acquisition by Dow

Stockholders of Allied Laboratories, Inc., have approved a plan under which Dow Chemical Company will acquire Allied's assets in exchange for Dow stock.

Kenneth F. Valentine, executive vice-president of Allied and head of Pitman-Moore Company, a subsidiary, says the union with Dow will result in greater accomplishments in the field of medical research.

The merger, which becomes effective December 30, received favorable votes from 82.6 percent of Allied's stockholders, as against 2.05 percent opposing.

Under provisions of the merger plan, each outstanding share of Allied Laboratories will be paid for by 2/3-share of Dow common stock. Allied has 797,851 shares outstanding, a spokesman says.

Ribicoff for Flemming As the Boss of HEW

It's Ribicoff for Flemming at HEW. President-elect John F. Kenedy disclosed last week that Gov. Abraham A. Ribicoff of Connecticut will be his Secretary of Health, Education & Welfare.

The HEW post was at one time expected to go to G. Mennen ("Soapy") Williams, the retiring governor of Michigan. Gov. Williams, instead, was named assistant Secretary of State for African affairs.

Gov. Ribicoff—one of the charter members of the FKBW (For Kennedy Before Wisconsin) Club—reportedly was offered an appointment as Attorney General, but he is said to have told Mr. Kennedy that he is much more interested in health, education and welfare matters.

Maleic: Worried About Over-Capacity? Not Heyden

Heyden Newport Chemical Corporation —whose 24-million-pound plant at Fords, N. J., is due to go on-stream in February —isn't overly concerned about the impending over-capacity in maleic anhydride.

Forecasts by OPD and others do not faze us, Simon Askin, president of the New York-based concern, in effect told the New York Society of Security Analysts last week.

It's figured that industry capacity for maleic will rise to 259 million pounds in 1961. Demand is expected to take another four or five years to hit the 120-million-pound mark.

According to Mr. Askin, Heyden is confident it will be able "to sell a very substantial volume" of its maleic production. What about the balance?

"We have an existing captive requirement of moderate size and we believe that at least 50 percent of the original capacity will be captively consumed before 1964."

What the company is chiefly banking on here is paper size. Heyden started producing paper chemicals this year, partly because paper size offers an upgraded market for its rosin.

A plus factor is that some of the newer sizes require maleic anhydride in their manufacture. In fact, paper size makers are believed to have used somewhat under 4 million pounds of maleic in their operations this year.

Also playing key roles in the Heyden product line: rosin, formaldehyde and pentaerthyritol. Rosin, which has about doubled in price in the past year, will hold on to its newly-won gains for a long time, Mr. Askin maintains.

Formaldehyde (at 3¾c. a pound in tank-cars for the methanol-free material) and pentaerythritol (at 31c. a pound in carlot lots), he says, should remain relatively

—*Continued on page 70*

P.A.'s Echo Recessionary Note: Business Is Coasting and Hoping

This report was prepared by the business survey committee of the National Association of Purchasing Agents.

There is no doubt that business is ending the year 1960 on a recessionary note. Most purchasing executives express an uneasy feeling and, at best, say their companies are "coasting and hoping." Many say that, to date, the real recession has been in profits rather than volume of business. However, our November production and new order figures indicate that both of these categories have worsened substantially in the last thirty days.

The pressure of rising costs is not being reflected in over-all commodity prices, for prices are still drifting downward despite numerous complaints that present margins of profit are not adequate.

The percentages are as follows:

	Better	*Same*	*Worse*
New Orders			
November	19	53	28
October	27	47	26
Production			
November	13	62	25
October	26	54	20

Employment is off a little again this month and all indications are that jobs will be hard to find in the immediate months ahead.

As would be expected with the present business uncertainty, purchasing executives are extremely cautious in their buying policy. They are making only the minimum commitments required to have material on had to meet scheduled jobs.

Our special question this month sought to determine if business could expect a real boost from Christmas retail sales. It was a disappointment to learn that only 20 percent of our members expect the retail Christmas business to be better than in 1959—and, in 1959, you will recall, this business was affected by the steel strike; 55 percent expect no change and 25 percent say it will be worse. It is evident that our members do not think

—Continued on page 50

Vinyls, Adhesives Firm Organized in Australia

National Starch & Chemical Corporation has joined forces with an Australian company, Jordan Chemical Works, Pty., Ltd., of Sydney, for a joint enterprise Down Under.

The two firms have organized Jordan-National Company, Pty., Ltd., to produce and sell vinyl polymers and the various adhesives made in this country by National Starch.

Manufacturing facilities and executive offices will be located in Sydney.

Max Glaser, managing director of Jordan Chemical, will serve in a similar capacity for the new concern.

Hydrocarbon Buying Yielding to Production

Mexico, which has imported its fluorinated hydrocarbons for the past fifteen years, will soon have its own production. Output will come from a new Mexican company, Halocarburas, S. A., which is being formed by Industrias Quimicas de Mexico, S.A., of Mexico City.

Industrias Quimicas de Mexico, S.A., an affiliate of Stauffer Chemical Company, New York, and other Mexican capital, will own 75 percent of the new company, and E. I. duPont de Nemours & Co., Wilmington, Del., will contribute 25 percent. All raw materials will be purchased in Mexico.

In the manufacture of "Freon," Halocarburos, S.A., will acquire trademarks, know-how and engineering assistance from duPont. The new company will also produce carbon tetrachloride, a solvent used

—Continued on page 70

Mobay Cuts Polycarbonates

Mobay Products Company, a subsidiary of Mobay Chemical Company, has posted price reductions of up to 25 cents a pound for its "Merlon" polycarbonate resins. The move follows action by General Electric Company (OPD 11/14/60) reducing "Lexan" polycarbonates. Both sets of reductions, similar in extent, become effective December 10.

Polystyrene Skirmish Points to 18-Cent Level

A competitive price skirmish in polystyrene molding and extrusion resins appears likely to end with an industry-wide quotation of 18 cents a pound for large shipments. The prevailing price was 21½ cents.

This new level applies to truckloads bound for the same destination where the delivery date is fifteen days prior to the new order date.

Foster Grant Company, Leominster, Mass., first made the price break public but Monsanto Chemical Company reports that it had notified its customers of the reduction on November 26, with an effective date of November 23. Foster Grant's move took effect December 1.

There is still a discrepancy on prices of regular tankcar shipments: Monsanto's is 18¼ cents, Foster Grant's 19 cents.

Other producers indicate they will remain competitive: Koppers Company reports its base price will be reduced to 18¼ cents, and Dow Chemical Company plans to issue a new price list this week.

The Week's Price Changes

Cedarwood Oil, Lavandin Oil, Quinine, Quinine Salts Advanced. Copra, Corn Oil, Grease, Vetiver Oil, Zinc Nitrate Reduced.

Prices Advanced

Cedarwood oil, 30c. per lb. (p. 58).
Lavandin oil, 22-24% material, 2c. per lb. (p. 58).
Menhaden oil, crude, ¼c. per oz. (p. 64).
Quinine, NF, 6.45c. per oz. (p.64).
Quinine bisulfate, 4.70c. per oz. (p. 52).
Quinine hydrochloride, 6.20c. per oz. (p. 52).
Quinine sulfate, 5.25c. per oz. (p. 52).
Soybean meal, $4.50 per ton (p. 64).
Spearmint oil, $1.40 per lb. (p. 58).

Prices Reduced

Coconut oil, crude, ¼c. per lb. (p. 64).
Copra, $5 per ton (p. 64).
Corn oil, crude, ¼c. per lb. (p. 64).
Refd., ¼c. per lb. (p. 64).
Cottonseed meal, $1 per ton (p. 64).
Cottonseed oil, crude, ¼c. per lb. (p. 64).
Refd., ¼c. per lb. (p. 64).
Grease, choice white, ¼c. per lb. (p. 64).
Grapefruit oil, $1 per lb. (p. 58).
Peanut meal, $1.50 per ton (p. 64).
Peanut oil, crude, 1c. per lb. (p. 64).
Refd., ¼c. per lb. (p. 64).
Soybean oil, crude, ¼c. per lb. (p. 64).
Refd., ¼c. per lb. (p. 64).
Vetiver oil, Bourbon, 25c. per lb. (p. 58).
Haitian, $2 per lb. (p. 58).
Zinc nitrate, tech., flake, 5½c. per lb. (p. 40).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Dec. 2, 1960	Nov. 25, 1960	Dec. 5, 1959
108.80	108.60	111.54

Gum Dip Project Looks Good

Hercules Powder Company and Varn Timber Company must think well of their cooperative projects to improve the harvesting of gum dip. The two firms fits have just teamed up to form a new company with a dual purpose: to continue the program and at the same time go in for the commercial production of pine gum. Hercules and Varn disclosed last April a cooperative project to seek more efficient methods for the harvesting of gum dip in the home territory of Varn—Hoboken, Ga.

Pine Gum Production Corporation hopes for the cooperation of pulp and paper companies and other large owners of workable pine forests. Permitting the turpentining of their trees will mean additional revenue to them, reports G. F. Hogg, general manager of the Hercules naval stores department.

The primary objective of the program is to improve, if possible, the efficiency and economy of production, and thus increase quantities of gum dip now reaching the market.

Hercules, from its home office in Wilmington, Del., points out that it has an over-all concern for rosin, both as a producer and as a consumer, and is vitally interested in increasing the supply of this commodity over the years.

ADVANCED: Rudolph Cubiccotti named administrative vice-president of Witco Chemical Company, New York. He had been vice-president of Sonneborn Chemical & Refining Corporation, a Witco subsidiary.

Kaiser Aluminum to Build $1.4 Million Fluoride Unit

Kaiser Aluminum & Chemical Corporation will start construction in mid-1961 on a $1.4 million aluminum fluoride plant at its Gramercy, La., works.

The Oakland, Calif., company describes this as another move in its program to integrate sources of important raw materials. The plant will supply a major portion of the aluminum fluoride requirements of the company's reduction plants.

The new facilities, located adjacent to existing alumina and caustic-chlorine plants, are expected to be on stream in the third quarter of 1962.

Of the raw materials used in aluminum fluoride production, fluorspar and sulfuric acid will be transported to the Gramercy Works dock by vessel and barge, and special alumina hydrate will be supplied from the corporation's alumina plants.

DuPont's 'Mylar' Film Down

E. I. duPont de Nemours & Co. has posted price reductions of 15 to 25 cents a pound for several types of "Mylar" polyester film. This is the first price cut since August, 1958, and the sixth since commercial production of "Mylar" began in 1954. Under the new schedule, the film is quoted at a range of $1.55 to $3.65 a pound.

Index to News and Market Reports

Association News

Drug Group Elects Raiser President..... 7
French Chemical Group Slates Meeting.. 7
P.A.'s Echo Recessionary Note..... 4
Tinsley Heads SACCI Nominee Slate.... 7
Voluntary Health Program Backed..... 63

Government News

Food Additive Batches Get Reprieve.... 5
Food Additives Law's Future Studied.... 3
Gov't Changes Role in duPont-GM Case. 7
Graphite Sale Called Off..... 50
Live Polio Vaccine Debut Put Off..... 5
Ribicoff to Get HEW Post..... 3
Safrol, Sassafras Ruling Issued..... 3

Industry News

ACTH Synthesized in Lab..... 3
Air Reduction Unifies Chemical Activities 5
Allied Acquisition by Dow Okayed..... 3
Cosden Forms Chemical Dep't..... 37
DDT Called 'Villain'..... 5
Dixie Chemical Slates Extraction Unit. 66
Drug Research in Jersey Appraised..... 50
DuPont Cuts "Mylar" Film Price..... 4
Fatty Acid Output Up..... 45
Ferrocenes Score on Heat Resistance.... 5
Freeport Starts Up Sulfur Mine..... 3
Glass Container Demand Rise Seen..... 50
Grace Blueprints Plastics Push..... 3
Gulf's Oxo Alcohol Unit Near Finish.... 44
Gum Dip Project Set..... 4
Kaiser to Build Fluoride Plant..... 4
McKesson Will Acquire Two Firms..... 3
Maleic Problem Doesn't Faze Heyden.... 3
Metal & Thermit Opens Lab..... 42
Mint Oil Output in Washington Tops US. 7
Mobay Reduces Polycarbonates Price.. 4
Molybdenum 10-year Supply Discovered. 7
Petrochemical Complex Opened..... 7
Polystyrene Price Cuts Reviewed..... 4
Rayonier Expanding; Cellulose Featured 5
Texaco Going Into Benzene..... 5

International News

French Chemicals Have Bright Future.. 7
Chemico Gets Contract for O'seas Unit.. 43
Germany Pushing Exports..... 5
Hydrocarbon Plant Slated for Mexico.... 4
Maleic Unit Set in Belgium..... 37
Phosphate Licenses Offered..... 60
Roger Williams Has New Overseas Office 42
Syntex Reaches Marketing Agreement.... 3
Vinyls, Adhesives Firm Set Up..... 4

Personnel News

Air Reduction Elects Milne..... 5
Cabot Presidency to Cabot..... 3
Formica Appoints Smith..... 55
Glidden Names Kiefer..... 50
Jefferson Appoints Darling..... 45
Mallinckrodt Names Division Heads..... 5
Nat'l Aniline Elects Draper V.-P..... 7
Pfizer Appoints Weber to R&D Post..... 7
Plastic Horizons Officers Resign..... 49
Rhodia Names Consultant..... 60
Sun Chemical Appoints Hereld..... 66
Texaco Names McKinley..... 3
Union Carbide Unit Promotes Husted.... 66
Vitro Appoints McLaughlin..... 5
Welche, Holme & Clark Names Dugan.. 43
Witco Appoints Cubiccotti..... 4

Market Reports

Acids..... 40
Agricultural Chemicals..... 51
Aliphatic Organics..... 66
Aromatic Chemicals..... 58
Blowing Agents..... 57
Botanical Drugs, Gums..... 54
Coal Chemicals..... 48
Coatings Materials..... 62
Drugs..... 52
Essential Oils..... 58
Fats & Greases..... 65
Fertilizer Materials..... 51
Fine Chemicals..... 52
Heavy Chemicals..... 40
Industrial Organic Chemicals..... 46
Metals, Nonferrous..... 41
Naval Stores..... 63
Oil Cake and Meal..... 65
Oils..... 64
Paint Materials..... 62
Pesticides..... 51
Petrochemicals..... 48
Petroleum Derivatives..... 61
Protective Coatings Materials..... 62
Spices..... 60
Surfactants..... 57
Trade Name Chemicals..... 57
Waxes..... 65

General Features

Advertisers' Index..... 70
Association Meeting Dates..... 7
Bids Wanted..... 71
Classified Advertisements..... 70
Coal Chemical Output..... 48
Crude Oil Stocks..... 61
Current Market Quotations..... 10
Editorials..... 38
Imports..... 71
Obituaries..... 37
OPD Price Index..... 4
OPD Reports from Europe..... 5
Washington Talks It Over..... 38

OIL, PAINT AND DRUG REPORTER, Vol. 178, No. 24, December 5, 1960. Published weekly on Monday except semi-weekly the last week in February and the last week in August by Schnell Publishing Company, Inc., 30 Church Street, New York 7, N. Y., U.S.A. Second-Class postage paid at New York N. Y. Single copy price: 50 cents. Subscription prices:—United States and Possessions, $5 a year; Canada and Newfoundland, $7; other countries, $12. Copyright, 1960, Schnell Publishing Company, Inc.

INVOLVED IN A DIVISIONAL CHANGEOVER: Three top men from now on at Mallinckrodt Chemical Works, St. Louis, Mo., as the result of the creation of new divisions. All are vice-presidents. Frederick M. Belmore (left) will head the industrial division. His associate, John E. Gaston (center) is taking over as general manager of the medicinal division, and Dr. Charles D. Harrington (right) will assume his duties as general manager of the nuclear division. The transition is the result of more than two years of study and planning. While the divisions are new from an organizational point of view, the company will continue through research to add to its line of manufactured chemicals which have served these fields for many years, Mallinckrodt reports.

Live Polio Vaccine Availability Appears Dim Until Next Fall

Prospects of a live polio vaccine being marketed in time for next year's polio outbreak have about disappeared. Problems yet unsolved—including those involved in transferring production of the vaccine from the laboratories to commercial plants on a mass scale—suggest that the vaccine will not be available before next fall. And when marketed, it is likely to run into stiffer competition from the Salk vaccine than previously anticipated.

G. R. Milne

These were the views expressed last week by Surgeon General Leroy Burney of the Public Health Service and his top staff aides closest to the work being done in this field. They spoke at the mid-winter clinical sessions of the American Medical Association held in Washington.

Recalls Sabin Hopes

Dr. Burney recalled that last August the conclusion was reached that the so-called Sabin strain of vaccine was suitable for use in the US and hopes were then expressed that producers would be licensed and productions would be under way in time for use early in the next polio season.

"Our Advisory Committee on Live Poliomyelitis Vaccine recognized at that time that there were still many problems to be worked out in taking production out of the laboratory and into mass production," he said.

"This was true of the Salk vaccine and is certainly no less true of the oral vaccine. These problems have been by no means resolved. In fact, based on the latest information provided informally by prospective manufacturers, it is our judgment at the present time that we cannot expect to have an oral vaccine for use by summer."

Meanwhile, efforts to improve the Salk vaccine and make it less likely to be

—*Continued on page 70*

Air Reduction Unites Its Chemical Activities

Air Reduction Chemical Company, New York, has put all its industrial chemical activities into a single operating division and named G. R. Milne to head them. Purpose, says Airco, is to provide a stronger competitive front, increase marketing strength and improve coordination all around.

The new division will be known as Air Reduction Chemical & Carbide Company. It will be made up of the old Air Reduction Chemical Company, Colton Chemical Company and National Carbide Company.

Along with Mr. Milne, who will serve

—*Continued on page 37*

Rayonier Expansion Goals Stress Cellulose Chemistry

A new chemical plant for making modified cellulose at Fernandina Beach, Fla., figures prominently in a $30 million slate of expansion projects now under way for Rayonier, Inc.

Russell F. Erickson, president of the New York-based company, told a paper industry audience last week that in its plans for growth, Rayonier is laying particular emphasis on cellulose chemistry and silvichemistry.

OPD Reports From Europe

German Chemical Producers, In a Drive for World Markets, Push Up Exports 19 Percent

West German chemical producers are vying aggressively with US manufacturers for business all over the world. How well are they succeeding? In this story-in-depth from abroad, OPD's European Editor gives a progress report on this economic drive.

FRANKFURT, West Germany—Look into the hold of a barge at one of West Germany's big chemical complexes and you'll see barrels of chemicals ticketed for Cairo, Tokyo, New Delhi and Santiago. Lunch with the sales director of another huge firm and you'll hear anecdotes about hotels in Hong Kong and Lufthansa flights to Sao Paolo. Exports for German chemical companies are no spare-time hobby and when an executive says "the world is our market," he's expressing more than a tired platitude.

Farbenfabriken Bayer, largest of the German concerns and one of the three major IG Farben successor-companies, had 43 percent of its total $585 million in sales outside the Federal Republic last year.

Farbwerke Hoechst and Badische Anilin & Soda Fabrik, the other two big IG splinters, each has well over 30 percent of sales in exports.

Exports Loom Large in Sales Picture

Overall German chemical exports run one-quarter of total chemical sales, with first-half results for 1960 showing exports up 19 percent to $720 million against the first half of 1959. Total chemical sales for the same period rose 17 percent to $2.7 billion. For all of last year, West German chemical sales totaled $4.9 billion, of which exports accounted for $1.3 billion.

The bulk of these exports go to other European countries, 62.7 percent in 1959 and 64.8 percent in the first half of 1960. Exports to European countries in the first half of this year were up 22 percent to $470 million. Shipments to Asia also have increased this year.

The US recession has held exports to America to an insignificant increase, while the boom in Germany has boosted US chemical imports by 50 percent to $93.5 million.

For 1959, German chemical exports to the US were $69 million, or 5.3 percent of the total, and chemical imports from the US were $140 million, or 28.2 percent of total chemical imports.

The large percentage of total sales to European countries highlights one major problem of the German industry—the division of Europe into the rival European Economic Community and European Free Trade Association.

While German companies have been pushing their Common Market sales effort, shipments to the other five EEC countries were 25.8 percent of total exports in the first half against 26.8 percent to the EFTA.

That's a business German companies aren't anxious to give up to their British and Swiss competitors, the two leading chemical countries in the EFTA.

Aside from this formidable commercial-political difficulty, German sales executives agree that the world export market in chemicals is getting tougher and tougher and prices seem only to go lower. And as far as these men can see, this trend is going to get worse and may never get better.

One salesman cites nitrogen fertilizers as a classic example of what's happening

—*Continued on page 9*

MARKETING HEAD: Philip H. McLaughlin, named director of marketing for Vitro Chemical Company, New York. He had been general sales manager of Century Chemical Corporation.

Texaco Will Turn Tap On Petroleum Benzene

Texaco, Inc., has finally confirmed long-rumored plans to turn on the petroleum benzene tap. As predicted by OPD some months back, the New York-based oil company's benzene entry will be a 30-million-gallon unit at Port Arthur, Tex. (OPD, 8/1/60).

In an announcement out of New York headquarters, the company discloses that most of the plant's output will be marketed directly to benzene-thirsty chemical makers in the US. The balance will

—*Continued on page 42*

Food Additive Batches Get Reprieve From FDA

Two more batches of chemical food additives have won a reprieve from Food & Drug Administration. The materials—some spray adjuvants and packaging components—now have until March 6, 1961, before the agency sets a tolerance or declares them intolerable.

Suppliers have the intervening months

—*Continued on page 44*

DDT Plays Villain In the Flea Circus

DDT is ruining the flea circus. So complains Alfred Testo, proprietor of such an enterprise in London.

Mr. Testo says it's hard to get fleas these days. DDT has made them scarce in England, and in Ireland there are so few that the price has gone up to sixpence (7 cents) a flea. And at that there aren't enough to go around.

Lately, Mr. Testo has gone as far as Portugal for his fleas, but there the price is three shillings (42 cents).

Ferrocenes Called 'Hot Stuff' for a Real Hot Job

The "hottest" thing in the organic coatings business today is likely to be a ferrocene.

In Air Force laboratories, researchers have been putting the heat on this group of chemicals to see just how far their well-known thermal resistance goes. And it looks as though it goes far enough.

The ferrocenes, says a spokesman for the Air Force, have passed the test with stable colors.

Robert M. Van Vliet, a principal speaker at last week's seventh annual science and engineering symposium in Boston, declared that the chemicals have thereby proved themselves the most satisfactory coatings yet for missiles and satellites.

To meet the challenge of the space environment, he explained, organic coatings research has been channeled in two directions.

The first goal was to obtain coatings with a high order of ultraviolet and thermal resistance in a vacuum; the second, to synthesize additives which could protect or stabilize the paint.

"Strangely," Mr. Van Vliet continued, "both of these approaches appear to point to the same type of chemical material—the ferrocenes." He described the chemicals as a class of metallo-organic "sandwich" compounds which show unusual thermal stability.

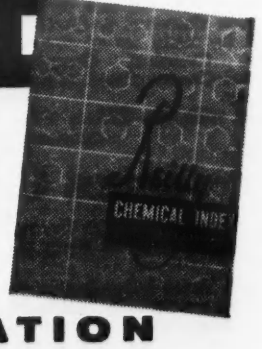
"Preliminary results of expanded research in this area," he added, "indicate that this material may be suitable both as a plastic material and as an improved ultraviolet light absorber."

Thanks to a new lightweight plastic foam, says another report from the Air Force, man may be able to "set up light

—*Continued on page 60*

REILLY
2-VINYLPYRIDINE

Vinylpyridine Latex, containing 2-Vinylpyridine, weds tire cord to rubber.



Send for the Reilly Chemical Index

Reilly CHEMICALS

REILLY TAR & CHEMICAL CORPORATION
MERCHANTS BANK BUILDING INDIANAPOLIS 4, INDIANA

Sales Offices in Principal Cities

NAT'L ANILINE VICE PRESIDENT: Neal M. Draper, named vice-president of its National Aniline Division by Allied Chemical Corporation, New York. In his new post, Mr. Draper will be responsible for sales of organic chemicals, dyestuffs and pigments.

Petrochemical Source: New One on the Scene

A new source of petrochemical intermediates has been opened up near Baton Rouge, La., by Union Oil Company of California and Goliad Corporation. The firms last week started operations at a reportedly unique $13 million plant complex for tapping natural gas that formerly went directly into interstate pipelines as fuel, with the chemicals unremoved.

Said to be the largest of its kind in the US and the first such in Louisiana, the facility is jointly owned by the two partners and operated by Goliad.

Preliminary products on the production slate are ethane, a building block for polyethylene; and propanes and butanes for the southwestern petrochemical industry.

Until now, such a gas processing system was thought impractical for two reasons:

- Louisiana gas is "lean"—that is, it has a very low liquid content.
- The Atchafalyaya Basin forms a natural barrier separating the producing fields from industrial markets of the state.

The first drawback disappeared with Union Oil's dramatic increase in natural gas production both on shore and in the Gulf of Mexico. The second was taken care of by Goliad's proposal to build two plants; one near the gas fields and the other near natural markets, and then connecting the two by pipeline.

French Chemical Group Plans American Meeting

The American section of Societe de Chimie Industrielle will hold the annual meeting of members December 14 at the Chemists' Club in New York. The meeting will start at 10:30 o'clock, to be followed by a luncheon and round table.

During the luncheon there will be a discussion on the thirty-second International Congress of Industrial Chemistry, which was held in Barcelona, Spain, October 23-30.

Government Is Switching Role: It Will No Longer Portray Boss In the duPont-GM Stock Case

The government has decided to abandon its attempt to direct the disposition of General Motors Corporation stock which is "unlawfully" held by E. I. duPont de Nemours & Co., Inc., Wilmington, Del. It will stick only to its basic proposition that divestiture of the stock is the sole way duPont can purge itself of violating the antitrust law and would leave it up to the chemical company to decided how best this might be done.

This was disclosed in a brief, filed with the Supreme Court of the United States by the Department of Justice last week, as preparations were made to argue the government's appeal from the decision of Federal Judge Walter LaBuy in the celebrated General Motors-duPont antitrust case. Oral arguments will be scheduled for later this term by the court.

Judge Favored Shifting Voting Rights

Judge LaBuy ruled in November, 1959, that "effective relief" could be attained, as directed by the Supreme Court when it held that duPont's $3.5 billion of share holdings in General Motors constituted a violation of the antitrust law, by simply passing duPont's voting rights in the GM stock on to its own public stockholders, and denying Christiana Securities Company and Delaware Realty & Investment Corporation (two duPont family holding companies) the right to vote their GM stock holdings.

Until now, it has been the argument of the government that duPont should be required to dispose of its stock to its stockholders in the form of stock dividends over a ten-year period, with any GM stock that would accrue to the duPont family under this plan to be sold on the open market. In its brief filed last week, however, it was not urging any particular scheme of disposal of the stock and would leave this up to the duPont company.

It proposed that duPont be required to file a divestiture plan within sixty days after the Supreme Court decided the matter and sent it back to the Federal District Court at Chicago.

To encourage a divestiture order within one year after it acts, the Supreme Court was asked to order the lower court to enjoin duPont from voting its shares or receiving dividends from its GM stock if a plan has not been put into effect in a year. The injunction would be lifted when the final divestiture order was issued by the lower court.

Drug Unit Elects Raiser; McNeil Is Procter Medalist

Carl K. Raiser, of Smith Kline & French Laboratories, was elected president, and Herbert C. Rorer, of Wm. H. Rorer, Inc., became vice-president of the Philadelphia Drug Exchange last week.

Mr. Raiser is assistant to the president of SK&F, and Mr. Rorer is chairman of the Rorer concern.

Other officers elected were Edward T. McKenna, sales manager for Shoemaker & Busch, Inc., as treasurer, and J. Mervin Rosenberger, as secretary.

Robert Lincoln McNeil, founder and retired president of McNeil Laboratories, was named recipient of the organization's Procter Medal. Formal presentation will be made at the annual dinner of the association on January 25 at the Bellevue-Stratford Hotel in Philadelphia.

HEADS R&D: Dr. Ernest M. Weber, named head of research and development for Chas. Pfizer & Co., Brooklyn, N.Y. He succeeds Dr. Jasper H. Kane, who has been made vice-president for scientific affairs.

Molybdenum Lode: It's Good for 10 Years

Discovery of enough molybdenum to keep the Free World supplied for over a decade at the current rate of consumption has just been confirmed by Molybdenum Corporation of America.

Exploration work, carried out at the company's Questa, N. M., property with government assistance, uncovered an ore body estimated to contain about 760 million pounds of the increasingly important mineral.

Although about 80 to 90 percent of molybdenum use is still accounted for by the steel industry, an increasing percentage of the metal is going into the nation's

—Continued on page 37

Tinsley, of FMC, Heads SACCI's Nominee Slate

Preston F. Tinsley, of Food Machinery & Chemical Corporation, has been nominated as 1961 president of the Salesmen's Association of the American Chemical Industry. The group's nominating committee has submitted the names of Charles E. Griffith, of R. W. Greeff & Co., as vice-president; Paul E. McCoy, American Potash & Chemical Corporation, as

—Continued on page 68

French Chemicals Look to a Future That's All Bright

French chemical makers, with a nod to their fast-growing petrochemical sector, expect to close 1960 with an overall production gain of 10 to 15 percent. An expansion of at least 10 percent yearly is anticipated for the next half-decade.

Such is the Gallic chemical outlook as limned in a current report by Business & Defense Services Administration.

In the petrochemical field, BDSA notes, France has lagged behind its competitors, and its fierce effort to catch up is a major factor in today's expansion splurge.

The Investment Is Heavy

Petrochemical investments totaled 450 million francs (4.93 francs equal US $1) in the three-year period 1956-58, and an outlay of 1.2 billion francs in anticipated for 1959-61, the agency points out.

Until now, petroleum-based companies have been at the forefront of this effort, but today's attention is focused on the tremendous potential of the Lacq area natural gas deposits.

Societe Nationale des Petroles d'Aquitaine (SNPA) is already extracting the gas for ethylene, and Ethylene Plastique Normandie is building a 15,000-ton-capacity plant to produce polyethylene. The latter is scheduled to open in 1961.

Aquitaine-Chimie is using methane from Lacq gas to produce acetylene and ammonia. Capacity of this plant, which has been scheduled to come on stream late this year, will be 25,000 tons of acetylene and 65,000 tons of ammonia annually.

Around the latter facility, BDSA notes, a host of plants are going up for production of derivatives and finished products, including nitrogenous fertilizers, acetaldehyde, vinyl chloride and methanol.

If the French chemical makers hit their 15 percent expansion target this year, it will have come on the heels of a 14 percent gain in 1959, according to BDSA's records. The 1959 gain was paced by a 24 percent rise in production of organic chemicals.

Imports of chemicals increased about 10 percent in 1959, BDSA goes on to note, and exports rose a whopping 30 percent. Devaluation of the franc made prices more competitive in France's overseas

—Continued on page 37

Mint Oil in Washington To Hit 2 Million Pounds

The State of Washington now produces more mint oils than all other states combined—and this year will produce about 1 million pounds each of peppermint and spearmint oils.

This is what Paul Tornow told the Flavor Chemists at its meeting last week in New York. Mr. Tornow is research director of I. P. Callison Company, Chehalis, Wash.

The mint oil industry in the Far West never amounted to much until the mid-forties, he told the group. Prior to that time it was centered primarily in the midwest.

However, a severe of attack of wilt—for which a cure has yet to be found—dealt

—Continued on page 43

Association Meetings

American Association for the Advancement of Science, annual meeting, Philadelphia, December 26-31.

American Chemical Society, national meeting, St. Louis, Mo., March 21-30.

American Institute of Chemical Engineers, Statler-Hilton hotel, Washington, D. C., December 4-7.

American Medical Association, committee on cosmetics, Chicago, December 29.

Association of American Soap & Glycerine Producers, annual meeting, Waldorf-Astoria hotel, New York, January 25-27.

Atomic Industrial Forum, annual conference, Fairmont hotel, San Francisco, December 14-16.

Chemical Buyers Group of the National Association of Purchasing Agents, midwinter conference, Commodore hotel, New York, February 2.

Chemical Specialties Manufacturers Association, annual meeting, Hollywood Beach hotel, Hollywood, Fla., December 5-7.

Drug, Chemical & Allied Trades Association, annual banquet, Waldorf-Astoria hotel, New York, March 2.

Electrochemical Society, Claypool hotel, Indianapolis, Ind., April 30-May 4.

Flavoring Extract Manufacturers Association, annual meeting, Savoy-Hilton hotel, New York, May 14-17.

National Drug Trade Conference, annual meeting, Gramercy Park hotel, New York, December 16.

National Pharmaceutical Council, annual luncheon, Pierre hotel, New York, December 15.

Northeastern Weed Control Conference, annual meeting, New Yorker hotel, New York, January 4-6.

Pharmaceutical Manufacturers Association, eastern regional meeting, Waldorf-Astoria hotel, New York, December 12-14; central regional meeting, Edgewater Beach hotel, Chicago, February 13-15; western regional meeting, Ambassador hotel, Los Angeles, February 20-21; annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., April 30-May 3.

Plastics Exposition, sponsored by the Society of the Plastics Industry, Coliseum, New York, June 5-9.

Proprietary Association, annual research conference, Biltmore hotel, New York, December 8; small-volume forum, Biltmore hotel, New York, December 9.

Science & Food Symposium, sponsored by the Food Protection Committee of the National Academy of Sciences-National Research Council, Statler-Hilton hotel, Washington, D. C., December 8.

Society of the Plastics Industry, reinforced plastics conference, Edgewater Beach hotel, Chicago, February 7-9; western section conference, del Coronado hotel, Coronado, Calif., April 20-21; national conference, Commodore hotel, New York, June 5-9.

Synthetic Organic Chemical Manufacturers Association, annual meeting, Roosevelt hotel, New York, December 8.

Technical Association of the Pulp & Paper Industry, annual meeting, Commodore hotel, New York, February 20-23.

Toilet Goods Association, annual convention, Waldorf-Astoria hotel, New York, May 9-11.

Water Pollution National Conference, sponsored by the Department of Health, Education & Welfare, Sheraton-Park hotel, Washington, D. C., December 12-14.

Morton . . . symbol of leadership in polymer floor polish development

MORTON LATEX RESEARCH . . . A comprehensive continuing research program in the laboratories of Morton Chemical Company brings you the best in Latex developments. Our understanding of polish formulating problems is your assurance of the latest techniques and developments in polymer polish ingredients.

TECHNICAL SERVICE FOR MANUFACTURERS. . . Analyzing your polymer floor polish and recommending improvements is one of Morton's most important projects. Our technical staff is on call, and on duty . . . in your laboratory or ours . . . until your problem is solved.

OUTSTANDING PERFORMANCE . . . Your goal . . . and ours . . . is to produce a polymer floor polish with the characteristics your customers want. *Morton's RWL Latices* permit you to formulate for high gloss, hardness, durability, leveling, or any other specific properties needed. Ultra-small particle size of less than 0.02 microns, and high stability of *Morton's RWL Latices* give you complete flexibility in developing your formulas.

Your Morton Man can give you complete details on *RWL Latices* and Morton's complete technical service. Your inquiry will receive immediate attention.

CHEMICAL PRODUCTS FROM MORTON

Modified Polystyrene and Acrylic Latices
Magnesium Oxide • Magnesium Carbonate
Bromides—Potassium, Sodium, Ammonium
Sodium Sulfate (salt cake) • Hydrochloric Acid
Allyl isothiocyanate • Benzotriazole
Photographic Chemicals
Diazo Chemicals • Cuprous iodide
3, 5-Diiodosalicylic Acid • Orthophenylene diamine
Phloroglucinol • Agricultural Chemicals

MORTON CHEMICAL COMPANY

110 N. Wacker Drive, Chicago 6, Illinois
Plants: Ringwood, Illinois—Manistee, Michigan
Weeks Island, Louisiana

German Chemical Producers, in Drive for World Marts, Push Up Exports

—Continued from page 5

in chemical exports. "The first thing an under-developed country does is build nitrogen fertilizer plants," he comments.

As the most economic size of plant is usually larger than the country's existing market, it means that an export market for fertilizer closes only to reappear as a competitor in other markets—frequently at lower prices.

Chemical exports to Africa in 1958 by German firms, for instance, were $50.7 million and in 1959, instead of rising with most other world markets, were $50.5 million. The export fertilizer market in Egypt collapsed, with that country now operating on its own account what's claimed to be the world's largest calcium-ammonium nitrate plant.

Exports to Red China Slumped in '59

Chemical exports by Germany to Red China, a country with a forced-draft industrialization program, in 1958 were $41.5 million, but slumped to $34.3 million last year. The difference was practical elimination of fertilizer imports by China and a halving of drugs imported from German firms.

Fierce international export competition in nitrogen fertilizers at cut-rate prices is specifically cited by Prof. Karl Winnacker, chairman of the management board of Hoechst, as the basic reason for its general 5 percent reduction in export and domestic fertilizer prices last summer.

Effect of nitrogen capacity growth in Africa, India and other countries can be seen in German export statistics, which show that while total nitrogen fertilizer exports are increasing, they aren't rising as rapidly as other chemical products.

In 1957 these exports were $73 million and in 1959 they had grown to $80.7 million, but as a percentage of total shipments, nitrogen fertilizers declined from 6.8 percent in 1957 to 6.2 percent last year.

Drugs are another export sensitive to this type of development. If a nitrogen plant is part of every under-developed country's first "five-year" plan, a drug industry comes soon after in priority.

About a quarter of all German drug production is exported, with such shipments up 20 percent in the first half of this year to $71.5 million. Of the non-European drug exports, about 40 percent go to Asia, 24 percent to South America and 12 percent to Africa.

Schering AG, a major independent drug firm, notes a decided shift away from export of finished products toward starter or intermediate materials.

It reports that pharmaceutical exports were up 23 percent in 1959, but a large part of this increase came from boosted sales of basic materials "partly due to the fact that the overseas markets which previously took finished products from Germany have now gone over to manufacturing for themselves."

Schering has particularly concentrated on export sales of steroid hormones and claims to have gained a larger share of the world market in these materials.

How to protect these export sales in the face of an accelerating spread of modern industrial technology—ironically German firms are among the world's leaders in selling and financing processes and plants to under-developed countries—is a problem getting much German thought.

Multiple Efforts to Push Sales

More market research and larger sales networks responsive to changes in demand are among the answers. But, increasingly, creation of foreign manufacturing and selling organizations seems to be a favored answer.

Competition for the Latin American chemical market illustrates both the increased sales effort and expansion of foreign manufacture by German firms. German chemical companies calculate their Latin American sales were $111.1 million in 1957 and over $120 million in 1959, though last year was a disappointing one for German chemical exports in Brazil.

German firms note that they have now pushed past England and Switzerland in supplying South America, ranking second to the US which takes about half the Latin chemical imports with the emphasis on drugs. Before World War II, German chemical companies had the leading position in Latin America.

Offshoots of German chemical companies are beginning to dot the Latin American maps. Bayer, for instance, has investments in firms in Mexico, Brazil and Argentina. This company has formed a Canadian subsidiary holding unit—Bayer Foreign Investments, Ltd., of Toronto (Bayforin)—to take over its investments in the Latin companies as well as those in France, the US, South Africa, Japan, India and Pakistan.

Bayer investments in Brazil are estimated to have been well over $10 million since 1956. (Brazil has been the largest single magnet for German capital, attracting $113 million since 1952 against $101 million for the seven EFTA countries together.)

A brief run-down shows that Bayer produces or will produce dyestuffs, chromates, insecticides, fungicides, weed killers, synthetic resins, plastics and drugs in Brazil. In Mexico, units produce drugs, pesticides and textile printing dyes. Argentine affiliates turn out drugs, tanning agents, azo dyestuffs, synthetic phenol, borax and boric acid.

South African, Asian Ventures

Chrome ore is supplied to the parent company by a South African mining subsidiary, while companies in India produce pigment dyes and, in Pakistan, azo and sulfur-black dyes. The Japanese company sells a range of plant protection agents.

Bayforin last year invested $4.2 million in extending or purchasing new interests and granted credits of over $1 million. The company's financial reports show that at the end of 1959, Bayforin's seventy-three participations had a nominal purchase value of $31.6 million with credits totaling about $8 million.

These participations include fifty-three majority holdings, thirteen holdings of 50 percent and seven minority interests of over 25 percent. By geography, six of the companies are in North America, twenty-seven in Central and South America, three in Africa and thirty-seven in Western Europe.

At the end of October, Hoechst opened in Cali, Colombia, a pharmaceutical laboratory to counteract growing difficulties of exporting to that market. At the end of last year, Hoechst's foreign investments totaled $23 million. Outlays this year are budgeted at about the same $4.8 million level as in 1959.

Hoechst is concentrating a large part of this foreign investment in strengthening its sales organizations in Latin America and Africa. Kurt Lanz, Hoechst sales director, notes that of the more than 4,000 people who work for the company outside Germany, about 1,800 are in Latin America.

The Key Latin Chemical Markets

Mr. Lanz believes Brazil, Argentina, Mexico, Venezuela and Colombia will continue to be the most important chemical markets in Latin America.

Pharmaceuticals and dyestuffs still are the major part of Hoechst's Latin sales, though organic chemicals and low-pressure polyethylene are beginning to move more rapidly. Mr. Lanz also says an intensified sales drive in the Central American countries has been successful.

In Brazil, Hoechst has Fongra Produtos Quimicos of Rio de Janeiro which produces pesticides, solvents and intermediates and chlorine. Manufacture of refrigerants and polyvinyl acetate is also planned for Brazil. Plants are also in the works for other Latin countries.

Recent major foreign investments by Hoechst have included expansion and modernization of the chlorine-alkali facilities of Electro-Quimica de Flix in Spain in which Hoechst has a 37.5 percent interest.

BASF also has interests in Latin America with a 64 percent holding in Companhia de Produtos Quimicos Indrongal of Rio de Janeiro which produces plastic dispersions, foamable styrene, dye auxiliaries and dyestuffs. The company has a 50 percent interest in a dyeing auxiliary company in Argentina.

Chemische Werke Huels' Brazilian Unit

Among the smaller German chemical firms, Chemische Werke Huels AG also has a Brazilian subsidiary which has interests in two production companies. Huels notes that the second and third quarters of last year were particularly hard ones in the Brazilian chemical market.

Entry into export markets with manufacturing and sales subsidiaries or joint ventures is not limited to so-called underdeveloped countries or other countries in Europe.

Bayer in particular has used this technique to gain wider access to the US chemical market. With Monsanto Chemical Company it formed Mobay Chemical Company to produce polyurethane plastic materials and polycarbonate resins.

Chemagro Corporation was formed in 1950 by Geary Chemical Corporation and Pittsburgh Coke & Chemical Company to establish American markets for Bayer agricultural products, and Bayer has since joined the ownership.

Verona-Pharma Chemical Corporation, in which Bayer has a majority interest, produces dyestuffs, organic intermediates, aromatics and flavors—with a net worth for the company of over $4 million.

BASF has formed Dow Badische Chemical Company at Freeport, Tex. Initial investment in this venture was reported to be about $6 million.

Dow Badische will produce acrylic acid and its derivatives on the basis of acetylene using BASF processes. A second installation will produce butanol and a third, caprolactam, also using BASF processes.

Downward Price Trend Noted

In expanding its sales to nearly double the 1953 amount, the West German chemical industry has been plagued by the same downward trend in prices that has affected US producers.

With a 1949 chemical price index of 193 and a high of 201 in 1951, the price index today is around 183. Prof. Winnacker of Hoechst estimates that price cuts have cost his firm about $14 million in sales volume over the last year.

But, paradoxically, German chemical executives have found this price decline a welcome club to hammer home to government officials the idea that the German boom is not "over-heated"—at least in chemicals.

For one frequently mentioned method of fighting the boom has been to end the tax concessions on export sales and the compensating tax penalties on imports, both of which were developed to spur export sales by German industry.

The tax incentive to export sales involves government forgiveness of the tax on total sales volume for all sales outside Germany.

The end or reduction of this tax incentive has been proposed by some government officials as one way of reducing the excess German balance of payments, while reduction of the tax on imports would increase competition in the domestic market and thus help to ease the effects of the boom.

Needless to say, German industry has almost unanimously opposed both proposals.

German chemical firms continue to push their aggressive expansion programs with few complaints or expressed worries about future over-capacity problems. Last year capital expenditures for the industry were estimated at a little over $400 million and this year budgets are expected to top $475 million easily.

Since 1954 there has been a sharp change in the basis of these investments. In that year, 64 percent of the estimated $224 million went for expansion of capacity at existing plants, 22 percent for "rationalization" (rationalization in this context refers to process modernization or de-bottlenecking), and 14 percent for construction of new plants or replacement facilities.

Breakdown of Capital Investment

Last year, the percentages were 37 percent expansion, 38 percent rationalization and 25 percent replacement facilities. The emphasis on rationalization is a reflection both of the profits squeeze and the extreme shortage of labor in West Germany.

Heavy areas of investment are in petrochemicals, plastics and synthetic fibers. Current expansion plans are particularly strong in expansion of some key inorganics as well as general capacity increases.

Organic and inorganic production ran along roughly parallel lines from 1953 to 1957, but since then organics have gone to considerably more than double 1953 figures with inorganics up only about 70 percent.

Chlorine is a good example of a heavy chemical whose capacity is being expanded. German chlorine imports in 1959 were 18,600 tons, four and a half times the imports of 1958. Last year, total German chlorine production was 592,168 tons, with consumption at the source totaling 463,489 tons.

Both Bayer and Hoechst are expanding chlorine capacity and Preussag, a mining company, is joining with Royal Dutch Salt to build a new chlorine facility in Germany near the Dutch border.

Operating at boom rates since about the second quarter of last year, many firms are raising their expansion budgets this year. Hoechst reported in the spring that it anticipated capital expansion of about $73.5 million and Prof. Winnacker now estimates 1960's expansion will be at least $83.5 million.

BASF also notes its plans have been upped by about $10 million to $95 million. BASF says the basic reason is longer delivery times for an increasing variety of products.

BASF is shifting the base of its organics production from coal and coke, which now account for about 60 percent of its organics, to petrochemicals. In addition, about 60-65 percent of its capital expansion is in the area of plastics.

Growth of Petrochemicals

Petrochemicals have shot up in West Germany, with the availability of raw materials. Crude oil processing was 1.1 million tons in 1950 and 15.1 million tons in 1959, while natural gas consumption rose from 51.5 million cubic meters to 387.6 million cubic meters in the same time.

One of the largest petrochemical ventures is Erdoelchemie, jointly owned by Bayer and the British Petroleum group. The BP refinery at Dormagen will deliver about 300,000 tons of raw materials to Erdoelchemie for processing into ethylene, propylene, butane, butadiene, ethylene oxide and glycol. Investment in this facility will total more than $70 million, it is reported.

Overall, investment in petrochemical facilities reached about $260 million at the end of 1958 and is expected to be about $500 million by the end of 1961 when total production will be on the order of 550,000 tons of carbon content. One effect of the increased petrochemical capacity has already been noticed in price cuts averaging 6 percent since the fall of 1959.

WEST GERMAN CHEMICALS

Exports in the Total Sales Picture

	Exports	Total Sales
*1960	$720 million	$2.7 billion
1959	$ 1.3 billion	$4.9 billion
1958	$ 1.0 billion	$4.3 billion
1957	$ 1.0 billion	$4.1 billion
1956	$938 million	$3.5 billion

*First half of year

CHEMICALS AND RELATED MATERIALS

All matters under this heading fully protected by copyright.

Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, December 2 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil cns. ..... lb. 1.90 - 3.40
Acacia (see Arabic gum).
Acetaldehyde 99% dms., c.l., works. lb. .12 - —
dms., l.c.l., works ..... lb. .13½- —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol)
Acetanilide, tech., flaked, bbls., bgs., c.l., frt alld lb. .32½- —
bbls., bgs., ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP bbls. 225-lb dms. any quantity lb. .90 - —
100-lb. dms., any quantity lb. .92 - —
Acetic acid, coml., or redist., 28%, bbls 100 lbs 4.80 - —
56%, bbls. ..... 100 lbs 8.25 - —
70%, bbls. ..... 100 lbs 9.95 - —
80%, bbls. ..... 100 lbs.10.45 - —
Acetic acid glacial, syn., CP, dms. dlvd 100 lbs.15.00 -20.25
tech., dms., c.l., dlvd .. 100 lbs.13.75 —
dms., l.c.l., dlvd .... 100 lbs.15.25 —
tanks, dlvd. ..... 100 lbs.10.00 —
USP, dms., dlvd. ..... 100 lbs.13.00 -18.25
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret. dms., l.c.l., dlvd E. lb. .18 - —
tanks, dlvd. E lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib dms., l.c.l., dlvd lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib dms., l.c.l., dlvd lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
fib dms., l.c.l. dlvd ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd lb. .10½- —
dms., l.c.l., dlvd ..... lb. .12 - —
tanks, dlvd. ..... lb. .08 - —
Acetonitrile, dms., c.l., t.l., dlvd lb. .35 — —
dms., l.c.l., dlvd lb. .36½- .37
tanks, dlvd lb. .32 - —
Acetophenetidin, USP, 200-lb. dms., 1,000 lbs., frt. alld lb. 1.20 —
100-lb dms., 1,000 lbs., frt. alld. lb. 1.22 —
Acetophenone, cns. dms ..... lb. .42 1.30
Tech., dms., c.l., works ..... lb. .47 —
dms., l.c.l., works ..... lb. .47¾- —
tanks, works ..... lb. .45 - —
N-Acetyl-p-aminophenol, dms., t.l. (min 23,000 lbs.), frt. adjusted lb. 1.24 —
dms., 5,000-lb lots, same basis lb. 1.30 1.45
dms., smaller lots, same basis lb. 1.35 1.63
Acetylene black, mo. bgs., c.l., duty and freight extra lb. .20 —
cs., l.c.l., ex whse lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 —
Acetylsalicylic acid, USP, cryst (20-40 mesh), powd (80 mesh), 250-lb dms., c.l., pt of shipt lb. 56¼- —
USP 10% starch granulation, 12-50 mesh, white, 50-lb. dms., c.l., same basis lb. 56¼ —
(Pink and green granulations 5c. per lb higher.)
Freight equald. ship. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms. c.l., frt alld. E of Denver lb. .35½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver. lb. .33 —
non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. lb .50 .55
Acrolein, tech., dms., c.l., works lb. .36 — —
dms., l.c.l., works lb. .36¾ - —
tanks, works ..... lb. .31 — —
Acrylamide, cms., t.l., f.o.b. works. lb. .58 — —
dms., l.t.l., same basis lb. .60 — —
Acrylic acid, glacial, dms., c.l., t.l., dlvd lb. .42½- —
dms., l.c.l., l.t.l., dlvd lb. .43½- —
tanks, dlvd. lb. .40 — —
tech., esterification, dms., t.l., frt. prepaid lb. .41½- —
tanks, same basis lb. .39 — —
tech., polymerization, dms., t.l., f.o.b. shipping point lb. .42½- —
tanks, same basis lb. .40 — —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .26 — —
dms., l.c.l., l.t.l., frt. alld lb. .27 — —
tanks, frt. equald lb. .23 — —

Abies Siberica Oil—Ammonium Bicarbonate

Adeps lanae (see lanolin).
Adipic acid, bgs. c.l., dlvd..... lb. .32¼- —
bgs., l.c.l., dlvd. ..... lb. .35 - —
Agar, USP Kobe No. 1, strip, bls. lb. 2.75 - 3.00
powd., 30 mesh., fib. dms lb 2.40 - —
dl-Alanine, dms., 100-lbs or more, f.o.b works lb. 5.25 - —
dms. 1-99 lbs., same basis lb.10.00 - —
Aldol, 95%, dms., l.c.l., works lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l. dlvd lb .99 - —
fib dms., l.c.l., dlvd lb 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs ..... lb 1.50 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E of Rockies lb 2.38 - —
Alkali blue, toner, litho flushed, 125-lb bbls., same basis, lb. 1.35 - —
Alkali blue prices 1c. higher W of Rockies
Allethrin, 90%, dms., frt. alld lb.28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½% dms. frt alld. ..... lb. .95 - 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd..... lb. .32½- —
dms., t.c.l., dlvd. ..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb cbys 5,005 lbs. or more, works lb. 1.50 - —
55-lb. cbys., 1,045 to 4,5.. lbs. works lb. 1.55 - —
55-lb. cbys., 55 to 990 lbs works. lb. 1.60 - —
Allyl chloride, dms., c.l., dlvd.. lb. .17½- —
dms., l.c.l., dlvd..... lb. .19 - —
tanks, dlvd ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde)
Almond oil nat., bitter, f.p.a., bots. lb. 2.75 3.45
NF, bots. ..... lb. 3.00 3.30
sweet, USP, cns., dms ..... lb. .70 1.30

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E.	east	p-	para
		e.p.	end point	Pac.	Pacific
a.p.a.	available phosphoric acid	equald.	equalized	pf.	proof
		exp.	expressed	phos.	phosphate
approx.	approximately	Ext.	external	photo.	photographic
artif	artificial	F.	fahrenheit	pkgs.	packages
ASTM	American Society for Testing Materials	ferment.	fermentation	powd.	powdered
		f.f.a.	free fatty acid	precip.	precipitated
		f.f.e.	free from chlorine	prod.	producer
Atl.	Atlantic	fib.	fiber	pt.	point
Be.	Baume	f.o.b.	free on board	pulv.	pulverized
bbls.	barrels	f.p.a.	free of prussic acid	purif.	purified
bgs.	bags	frt.	freight	redist.	redistilled
bls.	bales	gal.	gallon	refd.	refined
bots.	bottles	gran.	granular	refy.	refinery
b.p.	boiling point	grd.	ground	reg.	regular.
b.p.l.	bone phosphate of lime	i.&a.	iron and aluminum	resub.	resublimed
		i.b.p.	initial boiling point	ret.	returnable
b.r.	boiling range	imp.	imported	SD	specially denatured
bxs.	boxes	incl.	included	s.d.	single distilled
C.	centigrade	indust.	industrial	S.E.	southeast
cbys.	carboys	kgs.	kegs	sec.	secondary
CD	completely denatured	l-	laevo	secs.	seconds
c.i.f.	cost, insurance, freight	lacq.	lacquer	s.g.	specific gravity
		lb.	pound	shipt.	shipment
cks.	casks	l.c.l.	less carlots	soln.	solution
c.l.	carlots	l.t.l.	less truckload	s.u.	standard unit
cns.	cans	liq.	liquid	syn.	synthetic
coml.	commercial	mfrs.	manufacturers	tanks.	railroad tankcars
conc.	concentrated	m-	meta	tech.	technical
CP	chemically pure	m.a.p.	mixed aniline point	tert-	tertiary
cps.	centipoises			t.l.	truckloads
cryst.	crystalline	min.	minimum	t.w.	tankwagons
cs	cases	m.p.	melting point	USP	U. S. Pharmacopoeia
ctns.	cartons	N-	nitrogen		
cyls.	cylinders	n-	normal	vis.	viscosity
d-	dextro	nat.	natural	VM&P	varnish makers & painters
dbl.	double	neut	neutral		
denat.	denatured	NF	National Formulary	W.	west
dest-dist.	destructively—distilled	NNR	New and Nonofficial Remedies	whse.	warehouse
dl-	dextro-laevo			w.w.	water-white
dist.	distilled				

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Aloe, Cape, cs. ..... lb. 35 - .40
powd. cs. ..... lb 60 .65
Curacao, kgs. ..... lb. .75 - —
powd., kgs. ..... lb. .85 - —
Aloin, USP bbls., dms., kgs lb 4.25 3.70
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran. bgs., works 100 lbs 4.30 - —
Lump, dms., works ... 100 lbs 5.05 - —
Powd., dms., works .....100 lbs. 5.20 - —
USP, burnt., dms ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾- .08
Alum potassium, gran., bgs. works. 100 lbs 4.55 - —
Lump, dms., works .....100 lbs 5.30 - —
Powd., dms., works.....100 lbs. 5.45 - —
USP, burnt., dms ..... lb. .20 - .21
USP hydrous, dms ..... lb. .07¾- .08
Alum, potash-chrome, dms ... lb. .17 —
Alumina, calcined, bgs. c.l., works lb. .0535- —
bgs., l.c.l., works ..... lb. .056 - .0839
Aluminum acetate, basic soln., 24%, bbls. l.c.l works lb. 14 —
Aluminum chloride, coml. anhyd., dms., c.l., works, frt equald lb. .16 - —
dms., l.c.l. works lb 16½- —
cryst., dms., c.l. works 100 lbs 21.00 - —
dms., l.c.l. works 100 lbs.21.50 - —
Soln., 32° cbys., c.l., works lb 0495- —
cbys., l.c.l., works lb. 0570- .1098
tanks, works 100 lbs. 3.95 - —
NF, gran., dms. works lb. .31 .33
Aluminum fluoride tech., anhyd., bgs., c.l., works lb. .16¼ - —
bgs., l.c.l. works lb. .17¼ - .194
bulk, c.l. basis 80% lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c per lb higher
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs.11.00 - —
containers extra, l.c.l. works. 100 lbs.11.50 - —
Aluminum hydrate, heavy, bgs. c.l., frt. equald lb. .0370- —
bgs., 20,000-40,000 lb. to same basis lb. .0395- —
bgs., 2,000-20,000 lb. to same basis lb. .0495- —
bulk, c.l., same basis ..... lb. .0330- —
Aluminum hydroxide, dried, USP XV, fib. dms., works lb. .82½- —
fib. dms., contract, works lb. .79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
9-9½% Al_2O_3, fib dms., works. lb. .19 - —
fib. dms. contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate).
Aluminum metal, 99½% + 30-lb ingots, 10,000-lb. lots, frt. alld lb. .2810- —
50-lb. pigs, 10,000-lb. lots, frt alld. lb. .26 - —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .71 - —
Standard grade, dms lb. .48½- —
Aluminum powder, lining, extra-fine, dms lb. 1.13 - —
Standard grade, dms lb. .83 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c per lb. for 100-lb. dm., 1½c. per lb. for 50-lb dm. 3c. per lb. for 10 lb can and 5c to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs. 2c for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or more
Aluminum resinate, precip., 2.1% Al, dms lb. .45 - —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton.41.00 - —
bulk, c.l., same basis ton.40.00 - —
lump, bgs., c.l., same basis ton.44.00 - —
iron-free, bgs., c.l., works, frt. equald. 100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.30 - 8.30
USP, gran., 400-lb. dm., works. lb. .30 - —
USP, powd., dms., works ..... lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
P-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.35 - 1.60
Aminoazotoluene base, bbls., 100% basis lb. 1.15 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 2.15 - 3.05
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. allld..... lb. .45 - —
tanks, frt. allld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lbs. 2.50 - —
p-Aminophenol, dms., frt. allld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. allld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies..ton.92.00 - —
refrigeration, tanks, works, frt. equald. E. of Rockies ton.94.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton.95.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, 100-lb. dms., 1,000-lb. lots, works. lb. 1.90 - —
Ammonium biborate, gran., dms., c.l., works ton.325 - —
dms., ton lots, ex whse. 100 lbs.20.40 - —
dms., smaller lots, ex whse. 100 lbs 21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works.....100 lbs. 9.00 - —

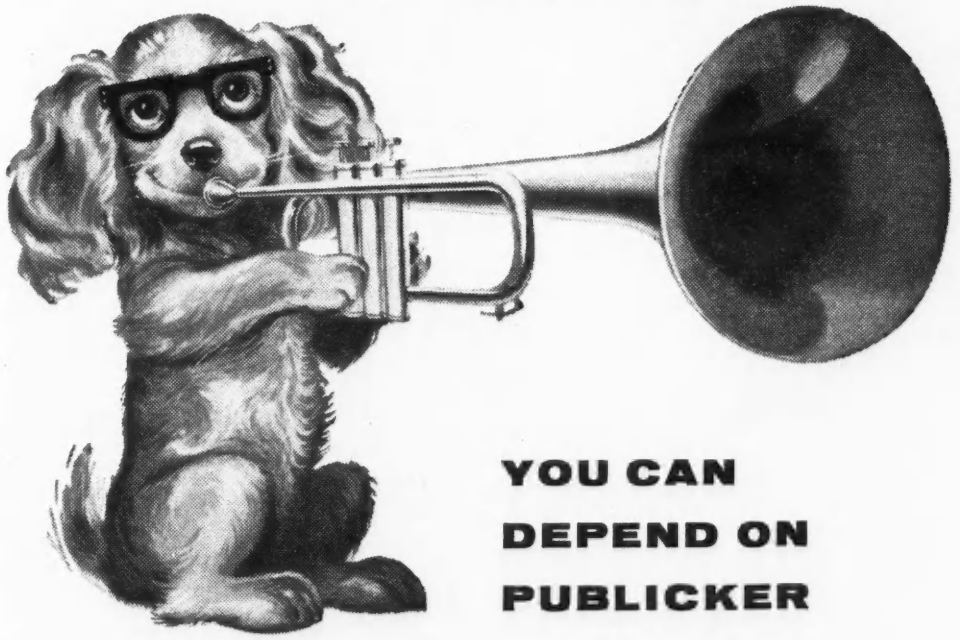
Ammonium bichromate, dms., works lb. .42 - .43
Ammonium bifluoride, dms., dlvd lb. .2145 - .2245
Ammonium bromide, NF, gran., dms., c.l., t.l., frt. equald lb. .44 - —
dms., l.c.l., same basis lb. .46 - —
Ammonium carbonate, USP, lump, dms., c.l. lb. .15½ - —
Ammonium chloride, white, tech., fine gran., bgs., c.l., works 100 lbs 6.00 - —
bgs., l.c.l., works 100 lbs. 8.00 8.45
USP, gran., 250-lb. drm lb .17¼ - —
Ammonium citrate dibasic, 250-lb. drm f.o.b. works lb .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate, tech., 200-lb. drm, f.o.b. works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqeous).
Ammonium iodide NF, 25-lb. jar, f.o.b. works lb 4.26 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½ - —
dms., t.t.l. frt. alld lb .21½ - —
tanks, frt. alld lb. 19½ - —
Ammonium lignin sulfonate, bgs., c.l. works 100 lbs. 3.25 —
bgs., l.c.l., works 100 lbs. 3.40 3.65
Ammonium linoleate 80%, dms., works lb. .50 .55
Ammonium molybdate, CP, cryst., 400 lb. dms. 15,000-lbs. works lb 1.22 - —
400-lb. dms. 2,000-lb. contracts, works lb 1.23 - —
400-lb. dms. works lb 1.24 - —
Ammonium nitrate, dom., tertilizer grade 33.5% N, bgs., f.o.b. works ton.67.00 - —
Ammonium nitrate, dom., with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.48.00 - —
Imp. Canadian 33.5% N eastern bgs. c.l., ship't point frt. equald to $3 ton base price ton.54.00 - —
Ammonium oxalate, tech. fine gran. 250-lb. drm, f.o.b. works E lb. .28½ - —
Tech. powd. 200-lb. drm., same basis lb .28½ - —
Ammonium pentaborate gran. bgs., c.l. works ton.193.00 - —
bgs., ton lots, ex whse 100 lbs 14.23 - —
bgs., smaller lots, ex whse 100 lbs.15.48 -17.48
Ammonium pentaborate powder $10 per ton higher in bags
Ammonium persulfate, tech., dms., 10-ton lots or more, works lb. .18 - —
dms., smaller lots, works lb. .20 - .21
Ammonium phosphate, comi., bgs., c.l. works frt equald lb. .09¼ - —
bgs., l.c.l., same basis lb. .10 - —
Dibasic, NF, V, bbls., dms lb. .46 - —
Dibasic, tech., bgs., c.l. works, frt. alld lb. .09¼ - —
Ammonium silicofluoride, dms., works lb. .12¼ - .13¾
Ammonium sulfamate, bgs., c.l., t.l., works lb. .19 —
bgs., c.l., works lb. .20½ - .27
Ammonium sulfate, standard granular, bulk, f.o.b. works, base price ton.32.00 - —
Ammonium sulfate, standard, gran., purif., c.l., 100-lb. bgs., f.o.b. works lb. .08½ - —
Large granular, bulk, c.l., works ton.35.00 - —
bgs., c.l., works ton 40.00 - —
Tech., bulk, c.l., t.l., works ton 52.00 - —
bgs., c.l., t.l., works ton 56.00 - —
bgs., l.c.l., t.l., works 100 lbs 3.20 5.20
Ammonium sulfide, tech., 40-44%, tanks, frt. equald, 100% basis, ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate)
Ammonium thiocyanate, tech., cryst., dms., c.l., works lb. .20 - —
dms., l.c.l., works lb. .22 .26
Tech., soln., 50%, tanks, frt. equald, basis ammonium thiocyanate content lb. .17¼ - —
Ammonium thioglycolate, comi., 55-gal. drms., ton lots, 100% basis lb 1.15 - —
d-Amphetamine hydrochloride, monobasic, dms lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic, dms lb 4.50 - 6.00
d-Amphetamine phosphate, 6b. dms., 100-lb. lots lb.15.00 —
dl-Amphetamine phosphate, dms.lb 4.20 5.60
d-Amphetamine sulfate, 6b. dms., lb.15.00 -17.00
dl-Amphetamine sulfate, 6b. dms., lb. 4.20 5.60
Amyl acetate, ex fusel oil, tech., dist. from 125 to 150°C., dms., c.l., frt. alld E. of Rockies lb. .18½ - .19
dms., l.c.l., same basis lb. .20 - .20½
tanks, same basis lb. .16 - .16½
Amyl acetate, ex pentane, reg., dms., c.l., dlvd lb. .19 - —
dms., l.c.l., dlvd. lb. .21½ - —
tanks, dlvd. lb. .16½ - —
tech., dms., c.l. dlvd. lb. .17 - —
dms., l.c.l., dlvd. lb. .18½ - —
tanks, dlvd lb. .14½ - —
Amyl acetate, syn., oxo process, dms., c.l., dlvd lb. .19 - —
dms., c.l., dlvd lb. .20½ - —
tanks, dlvd lb. .16½ —
Amyl alcohol, ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½ - —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½ - —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 - —
dms., l.c.l., frt. alld lb. .20½ - —
tanks, frt. alld lb. .16½ - —
Amyl alcohol, primary, dms., c.l., frt. alld lb. .20¼ - —
dms., l.c.l., frt. alld lb. .21¾ - —
tanks, frt. alld lb. .17¾ - —
Sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., same basis lb. .20½ - —
tanks, same basis lb. .17 - —
Tert-synthetic, dms., c.l., frt., tanks, alld, E lb. .17 - —
dms., l.c.l., frt. alld. E lb. .18½ - —
tanks, frt. alld E lb. .14½ - —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41¼ - —
dms., l.c.l., works lb. .43 - —
tanks, works lb. .39½ - —
2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 - 1.25
Amyl cinnamic aldehyde, dms lb. 1.70 2.20
p-tert Amyl phenol, dms., c.l., works, lb. .26¾ - —
dms., l.c.l., works lb. .27¾ - —
Amyl salicylate, cns., dms. lb. .71 - —
Amyris oil, dms lb. 1.55 - —
Anethol, tech., dms. lb. .80 - .92
USP, cns., dms. lb. 1.05 - —
Angelica root oils lb 85 90
Angelica root oil, bots lb.120.00 -140.00
Angelica seed oil, bots lb.120.00 -130.00
Aniline, dms., c.l., frt. alld lb. .20 - —
dms., l.c.l., frt. alld. lb. .21 - —
tanks, frt. alld lb. .18 - —
Aniline oil (see Aniline).

Aniline salt, dms., c.l., t.l., 20,000 lbs. min., frt. alld lb .33 - —
dms., l.c.l., same basis lb .35 - —
Anise oil, USP, dms. lb 1.75 3.00
Anise seed, Mexican, bgs. lb. .24 - —
Spanish, bgs. lb. .24 - —
Anisic aldehyde, dms lb 1.50 - 2.20
o-Anisidine, dms., c.l., frt. alld lb .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb 78 - —
p-Anisidine, dms., works lb .97 - —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b., works lb. .42½ - —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb 1.15 - —
Anthraquinone, 99.5%, bgs., c.l., frt. alld lb. .70 - —
bbls., l.c.l., same basis lb. .73 - —
Electrical grade, bgs., l.c.l., same basis lb 1.10 —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines lb. .29 —
cs., c.l., mines lb .29½ - —
Antimony oxide, bgs., c.l., frt. alld. lb. .26½ - —
bgs., l.c.l., frt. alld. lb. .28 - —
Prices of antimony oxide are 2% higher west of the Rockies.
Antimony sulfide, approx 65%, bgs., 10,000-lb. lots, dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb., drm., f.o.b. works, E lb. .69½ - —
USP, powd., 250-lb. drm., same basis lb. 74½ - —

Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms lb 55 - 70
Arabic gum, amber sorts, 10 bgs lb. .23 - .25
USP, powd., bbls. lb. .27 - .34
Areca nuts, powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tins, 100 oz or more oz 4.00 - —
l-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo.60.00 - —
l-Arginine monohydrochloride, dms., 10-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. 75 - —
Aromatic petroleum solvents (see Solvent Naphtha petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb .016 - —
bbls., c.l., works lb. .0.31 - —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½ - —
bbls., l.c.l. works lb .06½ - .07½
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb 3.70 - —
Light shades, bbls. lb 2.85 - —
Asafetida gum, cns lb. .36 - .40
Powd., bbls., dms lb. .75 .80
Asbestine (see Talc, fibrous, New York).

Asbestos, Canadian crude
6D, c.l. (30 tons) mines ton.86.00 —
7D, c.l. (30 tons) mines ton 75.00 —
7F, c.l. (30 tons) mines ton 71.00 —
7H, c.l. (30 tons) mines ton 61.00 —
7K, c.l. (30 tons) mines ton 50.00 —
7M, c.l. (30 tons) mines ton 44.00 —
7R, c.l. (30 tons) mines ton 43.00 —
7RF, c.l. (30 tons) mines ton 44.00 —
7T, c.l. (30 tons) mines ton 41.00 —
7TF, c.l. (30 tons) mines ton 44.00 —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher
Ascorbic acid, USP, dms., 100-kilos kilo. 6.80 - —
dms., less than 100-kilos kilo. 7.05 - —
Ash, black (see Barium sulfide)
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.43.00 - —
ex-whse., 5 tons or more, N. Y., N. J ton.89.50 - —
select, brilliant black, 340°-360°F. fusing pt., bgs., c.l., mines, ton.46.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton.43.00 —
Asphalt, petroleum, cut-back, tanks, tankwagon, refy gal. .09½ - —
emulsion, tanks, tankwagon, refy gal. 09½ - —
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton.21.00 - —
85-300 penetration, tanks, tankwagon, refy ton.20.00 —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins oz. 5.75 7.50

you're doggone tootin'



YOU CAN DEPEND ON PUBLICKER

For Uniform Quality—Steady Supply—Prompt Delivery

★ *Ethyl Alcohol* ★ *Ethyl Acetate* ★ *Butyl Alcohol* ★ *Butyl Acetate*
★ *Butyl Chloride* ★ *Isoamyl Alcohol* ★ *Acetone* ★ *Acetaldehyde*
★ *Acetic Acid* ★ *Amyl Acetate* ★ *Refined Fusel Oil* ★ *Proprietary Solvent*
★ *THERMICE brand of CO_2 (gas, liquid, solid)*

PUBLICKER INDUSTRIES Inc.
1429 WALNUT STREET, PHILADELPHIA 2, PA.
NEW YORK • NEW ENGLAND • PUBLICKER ALCOHOL & CHEMICAL SALES CORP.
PHILADELPHIA—LOCUST 4-1400 • NEW YORK—OXFORD 5-4160 • BOSTON—HOMESTEAD 9-0022
MIDWESTERN DISTRIBUTORS, PUBLICKER CHEMICAL CORP.
CHICAGO—RANDOLPH 6-1557-8-9 • WESTWEGO, LOUISIANA—UNIVERSITY 6-2727

Atropine sulfate USP, bots.....oz. 5.25 - 8.75
Azelaic acid, bgs., c.l., dlvd. ....lb. .40 - —
bgs. ton lots, same basis.....lb. .41 - —

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units. 50,000 units. .70 - —
Balm of Gilead buds, dried, bgs lb. 1.25 - 1.35
Barberry root bark, bgs lb. 1.00 - 1.10
Barbital, NF, 100-lb dms., f.o.b. works lb. 4.50 - —
Barbital sodium, NF, 100-lb. dms. lb. 4.75 - —
Barium carbonate, precip., bgs., c.l., works ton.111.50 - —
bgs. smaller lots, works ton.126.50 - —
Barium chlorate, dms., works lb. .32 - .41
Barium chloride anhyd., bgs., c.l., works ton.176.00 - —
bgs., t.c.l., works ton.196.00 - —
NF, cryst., dms., 400-lbs., works lb. .23 - —
Tech., cryst., bgs. c.l., works. 100 lbs. 7.00 - —
bgs., t.c.l. works 100 lbs. 8.00 - —
Barium chromate, bgs., frt. equaid. lb. .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equaid ton.208.00 - —
bgs., t.c.l., t.l., frt equaid ton.218.00 - —
Barium monohydrate, 99%, bgs., c.l., frt. equaid 100 lbs.11.25 - —
bgs., t.c.l., frt. equaid 100 lbs.11.75 - —

Barium monoxide (see Barium oxide).
Barium nitrate, bbls., c.l., t.l., dlvd. lb. .16 - —
bbls., t.c.l., t.l., dlvd. .....lb. .17 - —
Barium oxide, grd., dms., c.l., t.l., frt equaid ton275.00 - —
dms., t.c.l., t.l., frt. equaid ton.285.00 - —
Barium peroxide, dms., frt. equaid. lb .20 —
Barium stearate, ctns., c.l., frt. alld. lb. .41 - —
ctns., t.c.l, same basis ..... lb. .42 .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb. dm. lb. .19 - —
Barium sulfide, dms., c.l., works. ton.100.00 —
dms., t.c.l., works..... ton.110.00 —
Barytes, southern, off-color, bgs. ton 30.00 - —
95-75%, bgs., mines ton.30.00 - —
white, water-grd. paper bgs. c.l St. Louis ton.60.00 60.25
paper bgs., ex whse New York ton 84.85 —
Battery acid, cbys., c.l., works E. 100 lbs 2.35 —
cbys, t.c.l., works, E.....100 lbs 2.65 10.95
Bauxite, bulk, mines ..... ton 7.00 10.00
Bay oil NF, Puerto Rican, 50-55%, cns lb. 2.40 2.70
55-60%, cns. ..... lb. 2.55 —
NF, West Indian, 50-55%, cns. dms lb. 2.50 - —

Bayberry wax, bgs.....lb. .69 - .76
Beeswax, crude, African, bgs....lb. .54 - .55
Brazilian, bgs. .....lb. .58 - .59
Central American, bgs.....lb. .54 - .55
Chilean, bgs. .....lb. .59 Nom.
Refd., USP, bleached white, bricks, 100-lb. ctns. lb. .67 - .69
white, slabs, 100-lb. ctns ..lb. .66 - .68
yellow, bricks, 100-lb ctns lb .59 - .61
yellow, slabs, 100-lb. ctns lb .58 - .60
Belladonna leaf, bls. .....lb. .24 - .26
Belladonna root, bls. .....lb. .28 - .35
Bentonite, dom. 200 mesh, bgs., c.l., mines ton.14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton.95.20 - —
bgs., 1-ton lots, ex whse ton.99.00 - —
Imp. Italian, white, low gel., bgs., 5-ton lots, ex whse ton.93.40 - —
bgs., 1-ton lots, ex whse ton.97.16 - —
Benzal chloride, cbys., works lb. .44 - —
Benzaldehyde, NF, dms. .....lb. .80 - 1.05
Tech., dms., c.l., t.l..... lb. .47 - —
dms., t.c.l. ..... lb. .48 - —
Benzene, pure or nitration, tanks, works:
Baton Rouge, La ..... gal. .34 - —
Bethlehem, Pa ..... gal. .34 - —
Birmingham district gal. .34 - —
Chicago district ... gal. .34 - —
Cleveland district .... gal. .34 - —
Geneva, Utah ..... gal. .34 —
Houston, Tex. ..... gal. .34 - .40
Johnstown, Pa ... gal. .34 - —
Benzene, pure or nitration, tanks, works:
Lorain, Ohio .... gal. .34 - —
Middletown, Ohio ....gal. .34 - —
Mennequa, Colo. ... gal. .34 - —
Philadelphia district.. gal. .34 - —
Pittsburgh district gal. .34 - —
Port Arthur, Tex. ....gal. .34 - —

Benzene, pure or nitration, tanks, works:
St. Louis, Mo. District gal. .34 - —
Sparrows Point, Md. gal .34 - —
Syracuse, N. Y. .....gal. .34 - —
Terre Haute, Ind.....gal .34 - —
Youngstown, Ohio ....gal. .34 - —
Lackawanna, N. Y. ..gal. .34 - —
Lone Star, Tex. ... gal. .34 - —
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0065- —
Tech., low gamma, bgs., c.l., t.l., consignment, dlvd gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0056- —
Benzidine hydrochloride, bbls., c.l., frt. alid., 100% basis lb. 1.19 - —
bbls., t.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb 1.21 - —
Benzidine yellow, AAA, bbls., dlvd. lb 2.20 - —
AAOT, bbls., dlvd. .... lb. 2.55 - —
Lightfast, bbls., dlvd. ..... lb 3.40 - —
Benzocaine, dms., 100-lbs., frt alld. lb. 3.25 —
Benzoic acid, tech., dms., c.l., t.l., frt. alid lb. .25 .37
dms., t.t.l., same basis ... lb. .29 .41
tanks, same basis ... lb. .21 - —
USP, bbls., dms., ton lots lb. .48 - —
bbls., dms., 1,000-lb lots lb .50 —

BENZOL
Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra, cs. ... lb. .32 —
Benzophenone, dms ... lb. 1.35 - 1.40
Benzotriazole, tech. dms. 1,000-lb lots, works lb. 1.95 - —
Benzotrichloride, cbys. ... (all-in) lots or more, frt. equald.lb .21 - —
cbys., smaller lots, frt. equald lb. .23 - —
Benzoyl chloride, cbys. dms., c.l., works, frt. equald lb. .22 - —
cbys., t.c.l., same basis lb .23 - —
tanktrucks, dlvd Metropolitan area lb .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots, works lb. .98 1.08
Benzyl acetate, t.t.c., cns., dms lb. .54 - —
Benzyl alcohol, NF, dms lb. .54 - —
Tech., dms. dlvd lb. 47½- .65
Benzyl benzoate, USP, 40-lb. dms.lb. .62 - —
Benzyl chloride, tech., cbys., dms. c.l. works, frt equald lb. .22½- .25¼
cbys., dms., t.c.l., same basis lb. .23½- .25¼
tanktrucks, dlvd. Metropolitan area lb .21 —
A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices are ½c. lower
Benzyl cinnamate, cns. lb 3.30 3.60
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld lb. 1.25 - —
12-49 dms., same basis ..... lb. 1.35 - —
1-11 dms., same basis ..... lb 1.90 - —
Benzyl formate, cns. .....lb. 1.70 - 1.85
Benzyl isoeugenol, cns .....lb. 8.20 - 8.30
Benzyl propionate, bots .....lb. 1.30 - 1.35
Benzyl salicylate, bots .....lb. 1.50 - 1.85
Benzylidine acetone, bots ..... lb. 1.65 - 1.75
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate cns lb 56.50 - —
Berberine hydrochloride, bots lb 56.50 - —
Bergamot oil, nat. NF Italian, cns. lb.11.00 -12.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethylnaphthalene (see Methylnaphthalene).
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphtholamine).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride tech.).
Biotin cryst. bots gram 10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude cns..... lb 1.50 1.90
Rectified, cns. ..... lb 1.75 2.00
Bismuth chloride, jars ..... lb 5.11 —
Bismuth hydroxide dms ... lb 4.60 4.65
Bismuth metal bxs. ton lots... lb 2.25 - —
Bismuth nitrate, cryst., 250-lb. dm lb 2.25 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb 4.43 - —
Bismuth subcarbonate, USP 150-lb dm lb 3.70 - —
Bismuth subgallate, NF 700-lb dm., f.o.b. works lb. 3.98 - —
Bismuth subiodide fib dms lb 5.37 - —
Bismuth subnitrate, NF, 200-lb dm., f.o.b works lb. 3.15 - —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 4.15 - —
Bismuth trioxide, 100-lb. dms., f.o.b works lb. 4.40 - —
Bismuth-ammonium citrate, USP, powd., jars lb 4.22 - —
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld lb. .29½- —
bgs., c.l., t.l., less than 70,000 lbs., same basis lb. .30 - —
bgs., t.c.l., same basis ... lb. .31 - —
Blackberry root bark, bls. ... lb. 50 .55

BLACK PIGMENTS
Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works ton.160.00 - —
bgs., t.c.l., works ... ton.170.00 - —
bgs., t.c.l., New York whse ton.215.00 - —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton 5.50 - —
Bloodroot, bls. ..... lb. .85 .90

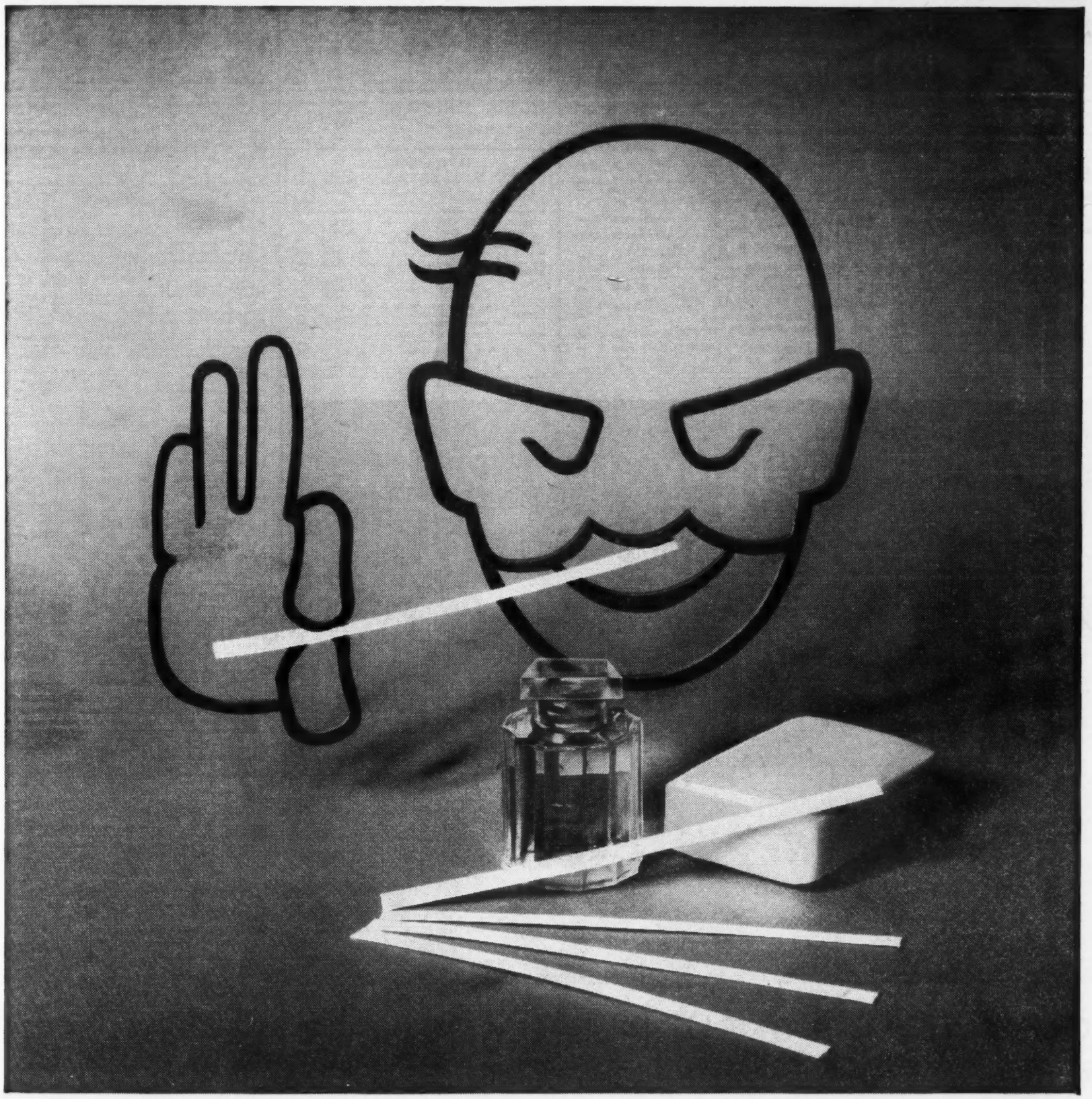
BLUE PIGMENTS
Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms lb. 2.05 - —
Peruvian, dms. ... lb. 1.65 - —
BON acid maroons, pure, bbls lb 1.75 —
Resinated, bbls. lb. 1.50 —
Bone black, dms., c.l., frt. alld lb. .1750- .2225
t.c.l., works ... lb. .1950- .2425
Pacific coast bone black prices 3¼c. per lb. higher.
Bonemeal, steamed works, E ton 80.00 - —
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip (see Calcium phosphate, tribasic).
Borax, tech., anhyd., 99½%, bgs., c.l., works ton 92.00 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs 4.43 - —
bgs., smaller lots, same basis 100 lbs 8.67 10.00
bulk, c.l., works ..... ton 83.00 —

Seems like every time we introduce our family of aralkyl (benzyl) amines, we have to add on another name or two. Biggest reason for this is that we often create new amines where existing ones cannot solve the problem. Never can tell . . . maybe one of them (listed below) can solve a sticky problem for you. We'd like to try. Write to us and describe the job that needs doing.

N-Benzyl-N-Methylamine
N, N-Dibenzyl-N-Methylamine
N-Benzylamine
N, N-Dibenzylamine
N-Benzyl-N, N-Dimethylamine
N-Benzyl-N, N, N-Trimethyl Ammonium Methoxide (40% in Methanol)
N, N-Dibenzyl-N, N-Dimethyl Ammonium Chloride
N-Benzyl-N-Methyl Ethanolamine
N-Benzyl Ethanolamine
N-Benzyl Diethanolamine
N, N-Dibenzyl Ethanolamine
N-Benzyl Isopropylamine
N-Methyl Formanilide
N-Benzyl Aniline
β-Phenylethylamine
N-Benzyl-N, N, N-Trimethyl Ammonium Hydroxide (40% in Methanol)

Miles Chemical Company
DIVISION OF MILES LABORATORIES, INC.
ELKHART, INDIANA COngress 4-3111



Refresh your product with HEYDEN BENZALDEHYDE

As an odorant, flavorant* or an intermediate, Heyden Benzaldehyde will help to refresh your product.

The leading supplier to manufacturers of aromatic chemicals, pharmaceuticals and dyestuffs, Heyden offers both N.F. and Technical grades.

Another sound idea: turn to Benzaldehyde as a raw material in your new product development. Write for samples and technical data.

*Benzaldehyde (Benzoic Aldehyde) is a substance recognized by the Food and Drug Administration as safe for use in foods as a synthetic flavoring. (Federal Register, August 12, 1960, Vol. 25, page 7698).

HEYDEN CHEMICAL DIVISION
Heyden Newport Chemical Corporation
342 Madison Avenue, New York 17, New York

2317

Borax—Calcium Carbonate

Borax, tech., gran., decahydrate, 99½% bgs. c.l. works, ton 50.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 5.32 —
bgs., smaller lots, same basis, 100 lbs 6.57 8.57
bulk, c.l., works ton 43.50 —
pentahydrate, 99½%, bgs., c.l. works ton 64.50 —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 6.05 —
bgs., smaller lots, same basis 100 lbs 7.30 9.30
bulk, c.l. works ton 58.00 —
USP, powd., bgs., c.l., works ton 54.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 6.45 —
bgs., smaller lots, same basis, 100 lbs 7.70 9.70
Bordeaux powder tribasic, bgs., c.l., dlvd lb. .24 - —
bgs., l.c.l., same basis lb. .26 - —
Boric acid, tech., anhyd., 99.9%, bgs., c.l. works ton 335.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 19.62 —
bgs., smaller lots, same basis, 100 lbs 20.87 22.87
cryst., 99.9% bgs., c.l. works, ton 183.50 —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 11.05 - —
bgs., smaller lots, same basis, 100 lbs 12.30 -14.30

Boric acid, tech., cryst., 99.9%, dms., c.l., works ton 168.50 - —
dms., ton lots, ex whse., New York or Chicago 100 lbs 12.30 - —
bgs., smaller lots, same basis 100 lbs 13.05 - —
Boric acid, gran., 99.9%, bgs., c.l., works ton 112.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 8.47 - —
bgs., smaller lots, same basis, ton 174.25 - —
dms., c.l., works ton 137.00 - —
dms., ton lots, ex whse, New York or Chicago 100 lbs 9.72 - —
dms., smaller lots, same basis 100 lbs 10.47 - —
bulk, c.l., works ton 106.00 - —
powd., bgs., ton lots, ex whse., New York or Chicago, 100 lbs 8.85 —
bgs., smaller lots, same basis 100 lbs 10.10 -12.10
Boric acid, powd., dms., smaller lots, same basis 100 lbs 11.45 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb. 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb. 1.25 - —
100-lb. cyls., works lb 1.70 - —
Boron trifluoride, gas, cyls., t.l., works lb. .70 - —
cyls., l.t.l., works lb. .70 - —
Brimstone (see Sulfur).

Broenner's acid, bbls. lb. 1.53 - —
Bromine, purif., cs., c.l., t.l., dlvd. E of Rockies lb. .32 - —
cs., l.c.l., same basis lb. .34 - .39
ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 -
ret. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½- —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 5-gal. cby., frt. equald lb. 1.93 - —
Bromstyrol, bots lb. 5.25 - 5.35
Brucine, cns oz. Nominal.
Brucine sulfate, NF, cns. 1.45 1.75
Buchu leaves, bbls. lb. .70 - .75

BROWN PIGMENTS

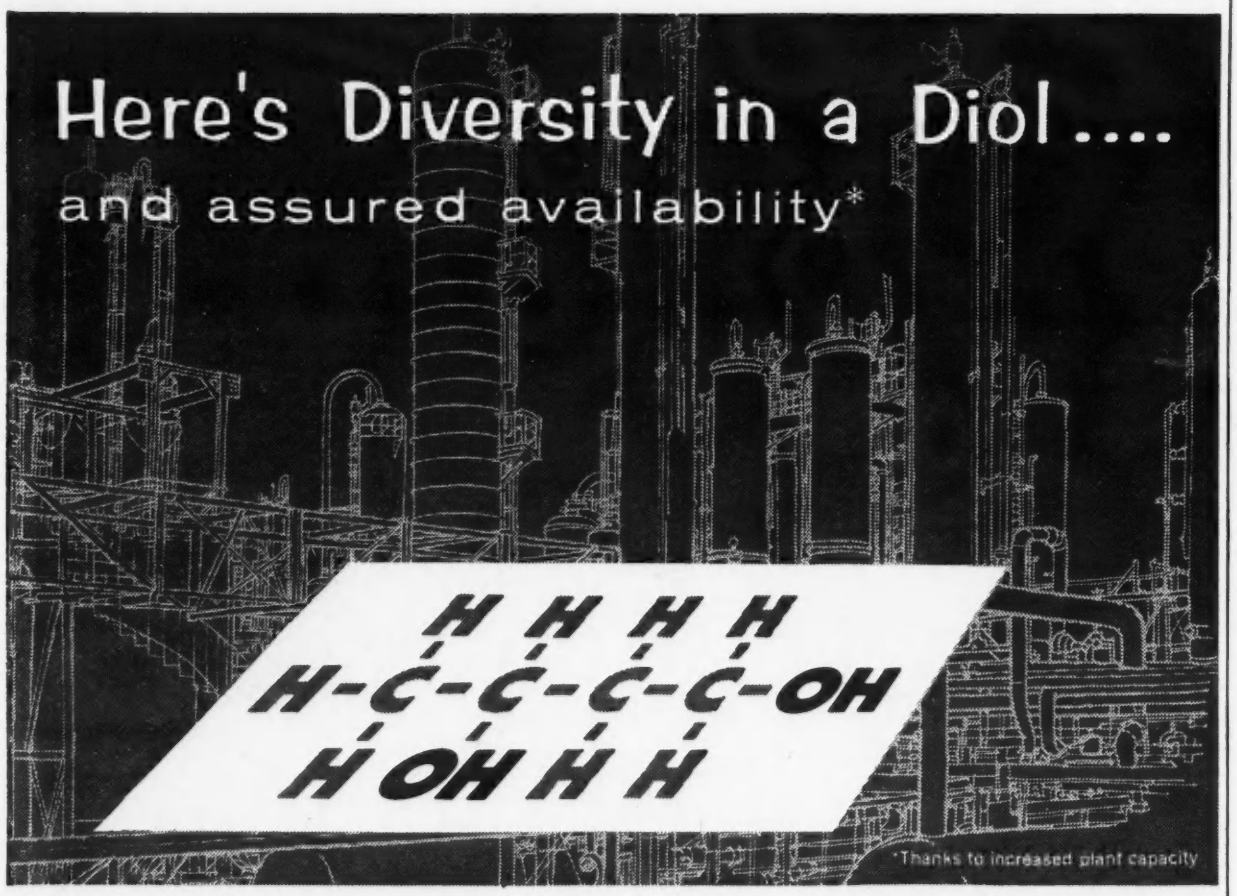
Brown pigment quotations are listed individually. For example, prices on Brown, Iron oxide may be found in the l's under Iron oxide brown.

Butadiene retd cyls., c.l., refy lb .21 —
cyls., l.c.l., refy lb. .22 - —
tanks, dlvd. lb. .12¾- —
Butene-1, tanks, works lb. .0625- —
Butene-2, tanks, works lb. .0570- —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18½- —
tanks, same basis lb. .14½- —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18½- —
tanks, same basis lb. .14½- —
sec-Butyl acetate, syn., dms., c.l., dlvd. E lb. .14¾- —
dms., l.c.l., same basis lb. .16¼- —
tanks, same basis lb. .12¼- —

n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E lb. .42½- —
dms., l.t.l. same basis lb. .43½- —
tanks, same basis lb. .40 - —
Prices of n-Butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
n-Butyl alcohol, ferment, dms., c.l., frt. alld lb. .18 - —
dms., l.c.l. frt. alld. lb. .19½- —
tanks, frt. alld. lb. .15½- —
n-Butyl alcohol, syn., dms., c.l., dlvd lb. .18 - —
dms., l.c.l., frt. alld lb. .19½- —
tanks, dlvd lb. .15½- —
Sec-synthetic, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb. .12½- —
n-Butyl alcohol, tert-synthetic, dms., c.l., frt. alld., dlvd E lb. .16 - —
dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .13½- —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb. .37½- —
dms., l.c.l., works lb. .38¼- —
n-Butyl ether, dms., c.l., works lb. .35¼- —
dms., l.c.l., works lb. .36 - —
tanks, works lb. .33¼- —
Butyl lactate, dms., c.l., frt. alld. E. Rockies lb. .42½- —
dms., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Butyl laurate, dms., works lb. .37½- —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
dms., l.c.l., works lb. .55½- —
Butyl oleate, refd., dms., l.c.l., works lb. .33 - —
Butyl phenylacetate, dms. lb. 4.50 - 4.60
Butyl phthalate (see Dibutyl phthalate)
Butyl stearate, dms. c.l. frt. all'd. E. of Rockies lb. .27¼- —
dms., l.c.l., same basis lb. .28¼- —
Butylamine (see Mono-, Di- and Tri-butylamine).
tert-Butylamine, dms., c.l., t.l., f.o.b. works lb. .47 - —
dms., l.c.l., same basis lb. .47½- —
tc., t.t., same basis lb. .45 - —
Butylated hydroxyanisole, food grade, dms., dlvd. lb 4.75 - —
6-tert-Butyl-m cresol (see Mono-tert-butyl-m cresol)
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p cresol)
1,3 Butylene glycol, dms., c.l., t.l., dlvd lb. .20½- —
dms., l.c.l., t.t.l., f.o.b. works lb. .22 - —
tanks, dlvd lb. .18 - —
p-tert-Butylphenol, bgs., c.l., dlvd., lb. .27½- —
bgs., l.c.l., works lb. .28¼- —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dlvd. lb. .23½- —
tanks, dlvd lb. .19¼- —
Butyric acid, 98%, dms., c.l., frt. equald lb. .34 - —
dms., l.c.l., same basis lb. .34½- —
tanks, same basis lb. .32½- —
Butyric ether (see Ethyl butyrate).
Butyrolactone, dms., c.l., t.l., works, lb. .40 - —
dms., l.c.l., same basis lb. 43 —
n-Butyronitrile, dms., c.l., dlvd lb. .56¼- —
dms., l.c.l., dlvd. lb. .57½- —
tanks, dlvd. lb. .54 - —

C

Cacao butter (see Cocoa butter).
Cadmium CP red dark shade, bbls., frt. alld. E of Rockies lb. 5.55 - —
Light shade, bbls., same basis lb. 4.65 - —
medium shade, bbls., same basis, lb. 5.30 - —
Medium light shade, bbls., same basis lb. 4.90 - —
Orange-red shade, bbls., same basis lb. 4.30 - —
Yellow, all shades, bbls., frt. alld. E of Rockies lb. 2.85 - —
Cadmium chloride, 400-lb. dms., f.o.b. shipping point lb. 1.49 - —
Cadmium iodide, 25-lb fib dms in lb 6.75 - 7.00
Cadmium metal, ingots or sticks, ton lots, cs., dlvd. lb. 1.60 - —
Cadmium nitrate, purif. cryst., 50-lb. dms., less than 5,000 lbs., f.o.b. shipping point, lb. .89 - —
400-lb. dms., 5,000 lbs. or more, same basis lb. .87 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld E. of Rockies lb. 1.65 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis lb. 1.95 - —
Red, light shade, bbls., same basis, lb. 1.73 - —
Red, medium shade, bbls., same basis lb. 1.87 - —
Red, medium light shade, bbls., same basis lb. 1.80 - —
Red, maroon shade, bbls., same basis lb. 2.03 - —
Cadmium-selenide lithopone maroon, bbls., frt. alld E. of Rockies lb. 2.76 - —
Orange, bbls., same basis lb. 1.58 - —
Cadmium-selenide lithopone red, orange-red shade, bbls., same basis lb. 1.72 - —
Red, dark shade, bbls., same basis, lb. 2.56 - —
Red, light shade, bbls., same basis, lb. 1.88 - —
Red, medium shade, bbls., same basis lb. 2.00 - —
Red, medium-light shade, bbls., same basis lb. 2.23 - —
Cadmium-selenide, lithopone, yellow, all shades, bbls., frt. alld, E of Rockies lb 1.19 - —
Caffeine, NF, citrated, dms, 100-lb. lots or more lb 2.70 - —
USP, nat., cryst., anhyd., dms., 100-lb lots or more lb 2.10 - —
Caffeine, USP, nat., cryst, hydrous, dms., 100-lb lots or more, lb 1.96 - —
Caffeine, USP, syn., anhyd., dms., 100-lb. lots or more lb. 2.10 - —
cryst. hydrous, dms. 100-lb lots or more lb 1.96 —
Cajuput oil, native, cns. lb 1.75 2.00
Redist., USP, cns lb 1.90 2.10
Calamine, USP, dms. lb. .34 —
Calamus oil, bots lb. 12.00 -20.00
Calciferol, cryst., 10-kilo or more lots, works gram .54 - —
1-10 kilo lots gram .55 - —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate, fib dms., 100 lbs. or more, frt. adjusted lb 3.10 - —
Calcium bromide, NF, jars, 100 lbs. or more lb. 1.10 - —
Calcium carbide, standard generator size, 600-lb. dms., c.l., dlvd ton 149.00 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l. works ton 10.50 - —
Calcium carbonate, chalk, whiting, 325 mesh, bgs., c.l. works, ton 32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton 30.00 —
10 to 20 microns, bgs., c.l. works ton 17.00 -18.00



CELANESE 1,3-BUTYLENE GLYCOL

can help you make better polyesters, polyurethanes, surfactants, humectants, plasticizers, coupling agents

1,3-Butylene Glycol is a low-cost, 4-carbon glycol with unusual stability. Its combination of two non-adjacent hydroxyl groups prevents dehydration or ring closure. It is highly hygroscopic, non-toxic and soluble in water and most organic solvents.

1,3-Butylene Glycol's longer chain length and steric configuration open new possibilities for producers of textile lubricants, printing inks, dyes, cosmetics, toilet goods, elastomers, plasticizers and alkyd, polyurethane and polyester resins.

It is of particular interest in the preparation of phthalic, maleic and fumaric alkyd resins and polyesters for plasticizers, coating materials, laminates, and potting compounds.

1,3-Butylene Glycol is available from Celanese in tank cars, compartmented cars and drums. Find out how this versatile glycol can improve your product . . . save you money in production costs. Write us for further information. Celanese®

SIX BASIC USES

POLYESTERS—Polyesters prepared with 1,3-Butylene Glycol are non-crystalline in structure due to the glycol's steric structure.

POLYURETHANES—Saturated polyesters can be prepared from 1,3-Butylene Glycol with various polyfunctional acids and alcohols.

SURFACE ACTIVE AGENTS—Esterified with fatty acids or etherified with alkylated phenol, 1,3-Butylene Glycol produces non-ionic detergents with good emulsion breaking properties and improved compatibility with non-polar compounds.

POLYMERIC PLASTICIZERS—Plasticizers with improved dielectric properties are obtained from 1,3-Butylene Glycol.

HUMECTANTS—Low volatility, low toxicity and good hygroscopicity properties make this glycol desirable as a humectant for tobacco, cosmetics and paper.

COUPLING AGENTS—Mutual solubility with water and various organic materials make 1,3-Butylene Glycol a useful blending and coupling agent for various pastes, dyes, textile lubricants, greases and toilet goods.

Celanese CHEMICALS

Celanese Chemical Company, a Division of Celanese Corporation of America.
Dept. 556-L 180 Madison Avenue, New York 16, N. Y.

Canadian Affiliate: Canadian Chemical Company Limited, Montreal, Toronto, Vancouver.
Export Sales: Amcel Co., Inc., and Pan Amcel Co., Inc., 180 Madison Ave., N. Y. 16.

Calcium carbonate, precip., dense, bgs., c.l., works ton 30.00 -38.50
bgs., l.c.l., works ton 45.00 -53.50
medium, bgs. c.l., works ton 38.00 —
bgs., l.c.l. works ton 48.00 -53.00
Calcium carbonate, surface treated, bgs., c.l., works ton 42.00 -44.00
bgs., l.c.l., works ton 57.00 -59.00
ultrafine, bgs., c.l., works ton 117.50 167.50
bgs. l.c.l., works ton 137.50 -187.50
Calcium chloride conc., flake or pellet 94-97%, paper bgs., c.l. works. frt. equald ton 39.30 • —
Flake, 77-80%, paper bgs., c.l., works, frt. equald ton 32.00 • —
Liquor, 40%. tanks. frt equald ton 12.50 • —
Powd., 77% min., paper bgs. c.l., works. frt equald ton 37.00 • —
Purif., gran., dms lb .27 —
Calcium chloride solid, 73-75%, dms., c.l., frt. equald ton 29.50 • —
dms. l.c.l. works frt equald. ton 36.00 -73.00
USP gran. dms. lb .32 —
Calcium chromate, bgs., dlvd lb. .37 —
Calcium cyanide dms., c.l., dlvd E. of Rockies lb. .20 —
dms., l.c.l. same basis lb. 24 • .55
Calcium cyclamate, 100-lb dms lb. 1.95 —
Calcium gluconate, USP, AA grade, 100-lb dm., ton lb. 73½ —
USP powd. 100-lb dm. ton lb. .66½ —
Calcium hydride lump. dms. works, lb 2.20 3.00
Calcium hypochlorite, high test, gran. 45-lb. cs., dlvd E. of Rockies cs. 23.85 -25.60
100-lb dms. same basis dm 33.30 -36.55
Calcium hypophosphite, dms. 1,000 lb lots lb 1.28 —
Calcium iodide, 25-lb. jars, works, lb. 4.27 • —
Calcium lactate NF, dms. f.o.b. works lb. 43 • .46
Calcium mandelate USP, 150-lb. dm., works lb. 3.25 • —
Calcium naphthenate, liq., 4% Ca., dms., frt equald lb. .30 • —
Calcium pantothenate, USP, jars, 1 kilo or more kilo. 35.00 • —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenosulfonate, dms lb. 1.24 • 1.25
Calcium phosphate, dibasic, USP, bgs. c.l. frt equald 100 lbs. 16.00 • —
Dibasic feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton 86.00 • —
bgs. c.l. t.l., f.o.b. Texas City works ton 80.50 • —
bgs. l.c.l. frt equald ton 96.00 • —
Calcium phosphate, dibasic, feed grade, 21% P., bgs., c.l., t.l., frt. equald ton 97.65 • —
bgs. c.l. frt equald ton 107.65 • —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs. c.l. prices.
Calcium phosphate, monobasic, bgs., 10,000-lb lots, frt. equald. 100 lbs. 7.45 • —
bgs., smaller lots, same basis. 100 lbs. 7.95 • —
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 • —
bgs. l.c.l., frt. equald. 100 lbs. 10.00 • —
Calcium propionate, any quantity, dms., dlvd E. of Rockies. lb. .34½ —
Prices W. of Rockies 3c. per lb. more.
Calcium phytate bgs., 50 lbs. or more f.o.b. warehouse N. Y. lb. .39 • —
Calcium resinate, precip., dms., frt. alld., works lb. .45 • —
Calcium silicate, hydrated, bgs., c.l., works lb. .06 • —
bgs., l.c.l., works lb. .06½ —
Calcium silicate paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. lb. .39 • —
ctns., l.c.l. lb. .40 • .44
Calomel, NF mild, powd., dms., 100-lbs., f.o.b. works lb. 4.32 • —
NF. mild, precip., dms., 100-lbs., f.o.b. works lb. 5.67 • —
Camphene, 46° m.p., dms incl., c.l., works lb. .15 • —
dms. incl., l.c.l., same basis lb. .16½ —
tanks, same basis lb. .12½ —
Camphene chlorinated, 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb. 3.63 • 3.70
Nat. USP powd. cs., 100-lb. lots, lb. .60 • .65
tablets, 1-oz. cs. lb. .85 • .90
Nat. USP. gran., bbls., 2,000-lb. lots lb. .59 • —
Camphor, syn., tech., 1 bbl. or more, lb. .48 • —
USP, gran., powd., bbls., 1,000-lb. lots lb. .58 • —
bbls., smaller lots lb. .59 • —
tablets, ctns., 1,000-lb. lots. lb. .80 • —
ctns., 500-lb. lots lb. .81 • —
ctns., smaller lots lb. .82 • —
Camphor oil, sassafrassy, dms. lb. .35 • .55
White, dms. lb. .26 • .50
Cananga oil, native, cns. lb. 5.00 • 6.50
Rectified, cns. lb. 7.25 -10.00
Candelilla wax, crude, bgs. lb. .55 • .56
Refd., pure, bgs lb. .60 • .62
Powdered Candelilla wax 20 to 100 mesh, 8c. higher.
Cantharides, Chinese, cs. lb. 1.00 • —
powd., bgs. lb. 1.15 • —
Russian, bgs. lb. 2.00 • 2.15
powd., bgs. lb. 2.15 • 2.30
Capric acid, dms lb. .29¼ • .31¾
tanks lb. 26¾ —
Caprolactum monomer, bgs., c.l., t.l., f.o.b. works lb. .52 • —
bgs., l.c.l., l.t.l., same basis lb. .57 • —
tanks, same basis lb. .49 • —
Capryl alcohol, 85% dms., c.l., t.l., works lb. .19 • —
dms., l.t.l., same basis lb. .19½ —
tanks, frt. equald. lb. .16½ —
Sec., 92-99%. dms., c.l., f.o.b. works lb. .22 • —
dms., l.c.l., f.o.b. works lb. .23 • —
tanks, f.o.b works lb. .19½ —
Caprylic acid, dms lb. .29¼ • .31¾
tanks lb. 26¾ —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 • —
NF, from African pepper, dms. lb. 4.50 • —
Caraway oil, NF, dms lb. 3.75 • —
Caraway seed Danish, bgs. lb. .16 • —
Dutch, bgs. lb. .18 • —
Polish, bgs. lb. .17¼ —
Carbazole, 97%, bbls, ton lots, works lb. 1.05 • —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .08 • —
bgs. c.l., works lb. .08½ —
bgs., l.c.l. works lb. .16¼ —
Carbon black, furnace, fast extruding, bgs., c.l., works lb. .08¾ —
ctns., l.c.l., whse. lb. .13½ —
Carbon black, high abrasion, bulk, c.l., works lb. .07¼ —
bgs., c.l., works lb. .07¾ —
bgs. l.c.l., dlvd. or whse lb. .14½ —
high modulus, bgs., c.l., works. lb. .06¼ —
ctns. l.c.l., whse. lb. .13 • —
semi-reinforcing, bgs., c.l., works lb. .05¾ —
bgs., ctns., l.c.l., whse lb. .12½ —
pigment, high color beads, ctns., c.l., works lb. .78 • —
ctns., l.c.l., dlvd. or whse lb. .87 • —
medium color, uncompressed, bgs., c.l., works lb. .14 • —
bgs., l.c.l., dlvd. or whse lb. .22½ —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E ton 60.00 -115.00
bulk, 3,000,000 lbs. or more, dlvd Metropolitan areas, E ton 55.00 • —
Solid, bulk, wholesale, works ton 85.00 • —
Carbon disulfide, 55-gal dms., c.l., works, frt. equald to competitive points lb. .071 • —
55-gal. dms. l.c.l., same basis lb. .086 • .091
5-gal dms., 30 dms to c.l., same basis lb. .131 —
5-gal. dms., less than 30 dms., same basis lb. .161 —
tanks, dlvd. lb. .0520- —
Carbon tetrachloride CP, consumers dms. c.l., frt alld. lb. .12¾ —
dms., l.c.l., frt alld. lb. .15¼ —
Tech., consumers dms., c.l., t.l., frt. alld lb. .11¾ —
dms. l.c.l. t.l.l. frt. alld lb. .14¼ —
tanks, frt alld lb. .10¾ .11¼
Carboxymethyl cellulose (see CMC).
Carbromal NF dms. 100-lb lots, works lb 4.00 4.25
dms., smaller lots, works lb 4.10 4.75
Cardamom oil, NF, bots. lb. 43.00 -45.00
Cardamom seed, bleached "A" lb. 3.45 • —
Bleached "B" lb. 3.15 • —
Decorticated Alleppey, cs. lb. 2.15 • —
Guatemala, cs. lb. 2.85 • —
Green, Alleppey, bgs. lb. 2.15 • —
Ceylon, bgs. lb. 2.20 • —
Carmine No. 40, NF, bulk, 100-lb. lots or more, dlvd. lb. 16.80 • —
bulk, smaller lots, dlvd. lb. 16.90 -17.30
Carnauba wax, chalky, bgs., ton lots lb. .73 Nom.
North Country, No. 2, crude, bgs., ton lots lb. .80 • .82
refd., pure, ton lots lb. .87 • .88
North Country, No. 3, Ceara, crude, ton lots lb. .67 • .68
North Country, No. 3, Parnahyba, crude, ton lots lb. .69 • .70
No. 3, refd., pure, bgs., ton lots. lb. .76 • .78
No. 1, Ceara, yellow, bgs., ton lots. lb. .98 • .99
Parnahyba, yellow, bgs., ton lots. lb. 1.00 • 1.01
Powdered carnauba wax, 20 to 100 mesh 8c per lb higher
Carotene tech. 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd gram. .20½ —
in carrot oil, 5,000,000 to 8,000,000 A units per lb. dms., works million units. .12 • —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd million units. .144 • —
b-Carotene, in vegetable oil, sea. solid suspension 400,000 A units per gram cns kilo. 57.60 • —
b-Carotene, liquid in vegetable oil, 500,000 A units per gram cns kilo. 72.00 —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram cns kilo. 240.00 —
Carvol, bots. lb 5.00 5.49
Cascara sagrada bark, bulk lb 32 —
Casein, dom. edible, acid precip., 30 mesh bgs., 10,000-lb. lots or more, works lb 56 —
edible, acid precip. 80 mesh, bgs. 10,000-lb lots or more, works lb 64 —
Imp., inedible acid-precip., grd., Argentine bgs., c.l., ex-dock Eastern seaports lb. .17¾ .18¼
Australian, bgs., c.l., same basis lb. .22¼ .22¾
Cashewnut shell, liquid, treated, dms., c.l., Newark, N.J lb. .24 • —
dms. ton lots, same basis lb 25 —
t.w., same basis lb .22½ —
Cassella acid, dms. frt. alld., 100% basis lb 1.44 1.75
Cassia oil, redist., USP, cns lb 7.50 9.00
Cassia, Padang, "A," bls lb. .31 • —
"B," bls. lb. .30 • —
"C," bls. lb. .29 • —
Korintje "A," bls. lb 34 —
"B," bls. lb. 30 —
"C," bls. lb. .30 —

why chemical companies are taking a closer look at

DELHI-TAYLOR

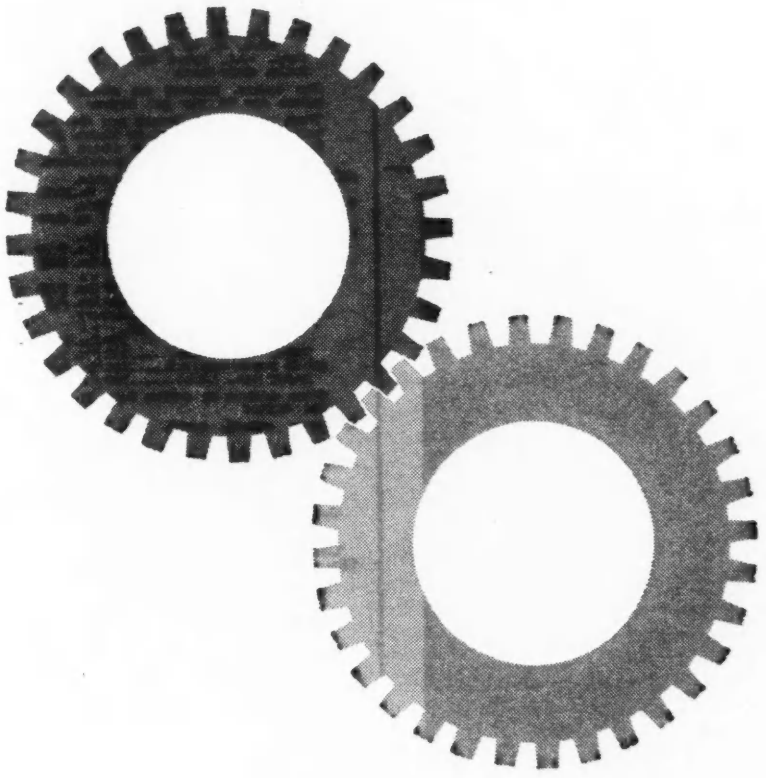
Chemical companies are taking a closer look at Delhi-Taylor as a source for their raw materials. The reason? Flexibility and dependability of Delhi service. Here are just a few examples:

- Delhi can move quickly into production on new petrochemicals. Our recent Orthoxylene plant, engineered by our own staff, was in production in 6 short months.
- Our selected feed stocks and diversified petroleum streams offer an unlimited source of chemicals.
- The location of our plants on the Inland and Coastal Waterways with multiple docking facilities means low cost, fast deliveries.
- Strategically located petrochemical terminals add to our delivery advantages.
- Rigid quality control and testing procedures assure highest purity products.
- Our experienced technical service department can assist you in planning your products.

Delhi is at your service. Now in production on a wide range of aromatic chemicals and aliphatic solvents, our plant facilities are geared to move quickly in new chemical directions.

CHEMICAL DIVISION
DELHI-TAYLOR OIL CORPORATION
FIDELITY UNION TOWER, DALLAS 1, TEXAS • 415 MADISON AVE., NEW YORK 17, N. Y.
CORPUS CHRISTI • CHICAGO • CHARLESTON, S. C. • BATON ROUGE • HOUSTON

Castor oil, dom., blown, dms., c.l.	lb	.2550-	—
dms., l.c.l.	lb	.2650-	—
Castor oil, dom. dehydrated, bodied, dms., c.l	lb	.2700-	—
dms., l.c.l.	lb	.2850-	—
tanks	lb	.2560-	—
dehydrated, unbodied, dms., c.l.	lb	.2500-	—
dms., l.c.l.	lb	.2660-	—
tanks	lb	.2360-	—
hydrogenated, bgs., c.l.	lb	.2450-	—
bgs., ton lots	lb	.2850-	—
bgs., l.c.l., dlvd.	lb	.3050-	—
Castor oil, No. 1, dms., c.l.	lb	.2150-	—
dms., l.c.l	lb	.2300-	—
tanks	lb	.2000-	—
No. 3, tech., dms., c.l.	lb	.2125-	—
dms., c.l.,	lb	.2225-	—
tanks	lb	.1925-	—
Refd., deod. dms., c.l.	lb	.2650-	—
dms., l.c.l.	lb	.2750-	—
tanks	lb	.2450-	—
USP, dms., c.l.	lb	.2350-	—
dms., l.c.l	lb	.2450-	—
tanks	lb	.2150-	—
Imported, No. 1, Braz., tanks	lb	.18¼-	—
Sulfonated, 50%, dms., works	lb	.15	.15½
75%, dms. works	lb	19	.19½
Castor oil acids, dehydrated, dms.	lb	.41¼-	.43¼
Split, dms.	lb	.33¾-	.34¾
Castor pomace, bgs., c.l., works	ton	35.00	—
Castoreum nat., cns.	lb	5.25	—
Syn., cns.	lb	9.00	—
Catechol, CP, cryst., fib., dms., works	lb	2 17½	—
Resub., dms. works	lb	4 29½	—
Catnip leaves, Southern, bls	lb	Nominal.	
Caustic potash (see Potash caustic)			
Caustic soda (see Soda, caustic)			
Cedarleaf oil USP XIII cns., dms	lb	3.25	3.50
Cedarwood oil, cns., dms.	lb	1.00	—
Celery seed, French, bgs.	lb	.37	—
Indian, bgs	lb	19	—
Cellulose acetate, flake, powd., bgs., c.l., dlvd E	lb	.38	.51
Cellulose acetate butyrate powd., 17% butyryl content, bgs., dlvd E	lb	.545	.555
27% butyryl content, bgs. dlvd. E	lb	.595	.605
38% butyryl content bgs. dlvd. E	lb	.545	.555
38% butyryl content, half-second, bgs., dlvd E	lb	.545	.555
50% butyryl content, bgs. dlvd. E	lb	.585	.595
Cellulose gum, methyl (see Methyl Cellulose)			
Cellulose gum, pure, high vis., bgs., 23,000-lb lots or more works, frt alld lb		.57	—
ogs. smaller lots, same basis	lb	.59	—
Cerium hydrate 45% CeO, fib dms., 100-lb lots or more lb		1.40	—
77% CeO, fib dms., 100-lb lots or more lb		1.74	—
Cerium oxalate (see Rare earth oxalate)			
Cerium oxide, optical grade, bgs., 50-lb lots or more, dlvd.	lb	1.85	1.90
bgs., smaller lots dlvd	lb	2.15	—
Cetyl alcohol NF fib cns., c.l., t.l., dlvd E	lb	41½	—
fib cns., l.c.l., same basis	lb	43¼	—
tanks same basis	lb	39	—
Extra, cns. c.l., t.l., dlvd E	lb	48½	—
fib cns. l.c.l., same basis	lb	50½	—
tanks same basis	lb	46	—
Chalk (see Calcium carbonate)			
Chamomile flowers, Hungarian,	lb	.95	1.05
Roman, cs.	lb	1.50	1.75
Chamomile oil, blue Hungarian bots	lb	250 00	—
Charcoal activated NF fib dms. c.l., works	lb	.34	—
fib, dms., 5-ton lots, works	lb	.35	.35½
fib dms. smaller lots works	lb	.36	.59
Charcoal, black (see Charcoal activated)			
Charcoal, bone (see Bone black).			
Charcoal hardwood, lump, bulk c.l., f.o.b plant	ton	55 00	—
briquets, bulk, c.l., f.o.b plant	ton	80.00	—
5-lb paper bgs., c.l., same basis	ton	106 00	—
20-lb paper bgs., c.l., f.o.b plant,	ton	90.00	—
40-lb paper bgs c.l. same basis	ton	86.00	—
Chenopodium oil, NF, cns	lb.	4.75	5.00
Chicago acid paste bbls, frt alld.	lb	3.21	—
Chinawood oil (see Tung oil).			
Chloral, tech, 94% min dms., c.l., works	lb	.23	—
dms., l.c.l., works	lb	24	—
tanks, multiple units, 5 cars.			
dms. l.c.l. works	lb	.21	—
Chloral hydrate, USP jars, 1,000-lb lots	lb	1.00	—
jars, 500-lb lots	lb	1.03	—
jars, 100-lb lots or less	lb	1.05	—
Chlordan, agricultural dms., c.l., frt alld	lb	.65	—
dms., l.c.l. 5,000-10,000-lb lots, frt alld	lb	.66	—
Chlordan, clarified, dms., c.l., frt. alld	lb.	.69	—
dms. l.c.l. 5,000-10,000-lb lots, frt alld	lb	.70	—
Chlorinated paraffin, 40%, dms., c.l., frt. alld	lb.	.15	—
dms. c.l. 10 cars or more, same basis	lb.	.16	—
70% dms., c.l. same basis	lb.	.18½	—
dms. l.c.l. 10 dms or more, same basis	lb.	.19½	—
Chlorinated rubber, 5, 10, 20 cps., ctns. c.l. works	lb	60	—
ctns. l.c.l. works	lb	61	—
125 cps. ctns. c.l., works	lb.	70	—
300 cps. ctns., c.l., works	lb.	80	—
Chlorine, liq., cyls c.l., works, frt equald	lb.	.11	—
cyls., l.c.l., Metropolitan area	lb.	.12½	.13¾
tanks, single units, works, frt. equald 100 lbs		3.25	—
tanks, multiple units, 5 cars, works, frt equald 100 lbs		4.15	—
tanks, multiple units, 4 cars, same basis 100 lbs		4.35	—
tanks, multiple units, 2 cars, same basis 100 lbs		5.35	5.85
tanks, multiple units, 1 car same basis 100 lbs		6.25	7.25
Chloroacetic acid mono, flake, 99%, purif dms., c.l	lb.	.23½	.25½
dms. l.c.l	lb	24½	—
tech., flake 96-97%, dms., c.l., dms. l.c.l. frt equald	lb.	.20	—
frt equald	lb.	.19	—
2-Chloro-4-aminotoluene, tech. liq., dms., frt alld	lb	1.03	—
4-Chloro-2-aminotoluene, fused, bbls	lb	1.38	—
6-Chloro-2-aminotoluene, tech., liq., dms., frt. alld	lb.	.66	—
m-Chloroaniline, dms., c.l., frt. alld.	lb.	.75	—
dms., l.c.l., same basis	lb.	.77	—
tanks, same basis	lb.	.73	—
o-Chloroaniline, dms., c.l., frt. alld.	lb.	.52	—
dms., l.c.l., same basis	lb.	.54	—
tanks, same basis	lb.	.50	—
p-Chloroaniline, dms., c.l., frt. alld.	lb.	.77	—
dms., l.c.l., same basis	lb.	.79	—
o-Chlorobenzaldehyde, dms., t.l., works	lb	1.05	—
dms., l.t.l., same basis	lb.	1.20	—
p-Chlorobenzaldehyde, dms., l.c.l., works	lb	1.95	—
o-Chlorobenzoic acid, fib. dms., t.l., works	lb	1.10	—
fib. dms., smaller lots, works	lb	1.25	—
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works.	lb.	2.25	—
fib. dms., less than 2,000-lbs., same basis	lb.	2.30	—
Chloroform, tech., dms., c.l., dlvd. E	lb.	.18	—
dms., l.c.l., same basis	lb.	.19	—
tanks, same basis	lb.	.17	—
Chloroform, USP, dms., c.l., dlvd.	lb.	.27	—
dms., l.c.l., dlvd.	lb.	.30	—
tanks, minimum 4,000 gals. dlvd.	lb.	.25	—
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis	lb.	.81	—
Powd., dlvd. E. 100% basis	lb.	.86½	—
4-Chloro-2-nitroaniline, powd., dlvd. E	lb.	.86	—
4-Chloro-2-nitrophenol, tech., paste, dms, frt. alld	lb.	.75	—
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld	lb.	.99	—
o-Chloro-3-nitrotoluene tech., solid, dms., frt. alld.	lb.	.20½	—
o-Chlorophenol, dms. c.l., frt. equald	lb.	.37	—
dms. l.c.l. same basis	lb.	.38	—
p-Chlorophenol, dms., c.l., frt equald	lb.	.37	—
dms. l.c.l. same basis	lb.	.38	—
Chloropicrin, comi., cyls., 180 lbs., frt alld	lb	1.07	—
cyls., 100 lbs., same basis	lb	1.08	—
cyls., 50 lbs., same basis	lb	1.14	—
Chlorosulfonic acid, dms., c.l., frt. equald	lb.	.0465	—
dms., l.c.l. frt equald	lb.	.0515	—
tanks frt equald	lb.	.0415	—
Chlorosulfonic acid, in stainless steel dms ½c per lb higher			
o-Chlorotoluene tech. dms., t.l., works	lb.	.37	—
dms., l.c.l., t.l. same basis	lb.	.38	—
Choline bitartrate, 100-lb. dms., frt. equald	lb.	1.25	—
Choline chloride, 100-lb. dms., frt. equald	lb.	1.25	—
Choline dihydrogen citrate, 100-lb. dms., frt. equald	lb.	1.25	—
Chrome green CP dark, light medium blue content, 1-15%, bbls dlvd E of Rockies.	lb.	.43	—
blue content 16-30%, bbls., same basis	lb.	.44	—
medium blue content, 31-45% bbls same basis	lb.	.44	—
blue content, 45-49% bbls., same basis	lb.	.45	—
Chrome green, reduced color 25%, bbls., same basis	lb.	.20	—
Chrome green prices 1c higher W of Rockies			
Chrome orange CP bbls. dlvd E of Rockies	lb.	.35	—
Chrome orange prices 1c higher W of Rockies			
Chrome yellow CP bbls. dlvd E of Rockies	lb.	.35	—
Chrome yellow price 1c higher W of Rockies			
Chromic acid 99¾%, dms., c.l., works, frt. equald	lb.	.29½	—
dms. l.c.l. dlvd N Y Metropolitan area	lb.	.30	.31
Chromic acid, NF (see Chromium trioxide)			
Chromium acetate, soln., 7½%, dms., 500-2,000-lb lots, works.	lb.	.10	—
Chromium fluoride bbls., works	lb.	.51	.53
Chromium oxide, hydrated, bbls., fib dms. c.l. frt alld.	lb.	1.20	—
Pure bgs., c.l., frt alld	lb.	.44½	—
bgs. l.c.l. same basis	lb.	.45¼	—
Chromium trioxide, NF, bots	lb.	1.15	—
Cinchona bark, NF, red, broken, bgs	lb	.25	—
NF yellow broken, bgs	lb.	.35	.40
Cinnamic acid, refd., bots	lb.	2.50	3.50
Cinnamic alcohol, bots	lb.	1.50	1.60
Cinnamic aldehyde dms	lb.	.80	1.00
Cinnamon Ceylon, No. 2, bgs	lb.	.53	—
Ceylon, No "0000," bgs.	lb.	.73	—
Cinnamon bark oil, bots	lb.	48.00	-56.00
Cinnamon leaf oil, crude, dms	lb	1.60	2.00
USP (Cassia), cns., dms	lb	8.50	13.50
Citral CP, bots.	lb.	3.60	4.00
Extra, bots	lb.	3.60	5.00
Syn., dms	lb.	7.25	7.40
Citric acid USP anhyd., fine gran., bgs. dms., c.l	lb.	.29½	.30
bgs. dms. 10,000-lb lots, 1 shipt	lb.	.30	.30½
bgs., dms., smaller lots	lb.	.30½	.31
Citric acid, USP hydrous, fine gran., bgs., dms., c.l	lb.	.27½	.28
bgs., dms., 10,000-lb lots, 1 shipt	lb.	.28	.28½
bgs., dms. smaller lots	lb.	.29	.29½
Powdered citric acid ½c. per lb. higher.			
Citronella oil, Ceylon, dms	lb.	1.00	—
Java-type, dms.	lb.	1.00	—
Citronellal, bots., dms	lb.	1.40	1.60
Citronellol, bots. dms.	lb.	1.90	2.50
Citronellol, synthetic, dms	lb.	1.70	—
Civet, artif., bots	lb.	13.75	-15.00
Nat. bots	oz.	8.50	-15.00
Clay, ball, dom., airfloated, bgs., c.l. Tenn	ton.	17.50	-21.50
crushed shed moisture, bulk, c.l., Tenn	ton.	8.00	-11.25
imp. airfloated bgs. c.l., Atl. port	net-ton.	43.00	-47.00
lump, bulk, Atl. port	net-ton.	31.50	-37.50
Clay, China dom., dry-grd., airfloated, 99%, 325 mesh, Georgia bgs., c.l., works	ton.	11.00	-17.00
Georgia bgs. l.c.l., works	ton.	13.50	-22.50
imp. white, lump, bulk, c.l., ex-dock Philadelphia, Portland, Me	long-ton.	23.00	-35.00
white, powd., bgs. c.l., ex dock	net-ton.	50.00	—
bgs. l.c.l. ex whse	net-ton.	60.00	-70.00
Cleaners naphtha, petroleum, 105°F Flash, tankcars, New Jersey and New York	gal.	18	—
Group 3	gal.	.1275	—
Houston, Texas	gal.	.145	—
140°F Flash, tankcars, New Jersey or New York	gal.	.205	—
Group 3	gal.	.154	—
Houston, Texas	gal.	.17	—
Cleve's acid, tech., mixed, solid, dms., frt. alld	lb.	1.05	—
1.5, tech., solid, dms., frt. alld	lb.	.77	—
1.7, tech., dms., frt. alld	lb.	2.20	—
Cloves, Madagascar, bgs.	lb.	.37	—
Zanzibar, bgs.	lb.	.38	—
Clove bud oil, USP, dms.	lb.	2.70	3.60
Clove leaf oil, crude, dms.	lb.	1.25	—
CMC, crude, 96.4% low or medium vis., bgs., 23,000 lbs., dvld. E., 100% basis	lb.	.40	—
96.4% low, or medium vis., bgs., less than 23,000 lbs., dlvd. E., 100% basis	lb.	.42	.50
65%, low or medium vis. bgs., c.l., dlvd. E., 100% basis	lb.	.40	—
l.c.l., dlvd. E., 100% basis	lb.	.42	1.00
purif., high vis. (see Cellulose gum).			
CMC, standard low or medium vis., bgs., 23,000 lbs. works, frt. alld	lb.	.57	—
bgs., smaller lots, same basis.	lb.	.59	1.00
CMC prices W. of the Rockies are 2c. per lb lower and are on a works basis.			
Coaltar, crude resale for soln., tanks, works	gal.	.17	—
Refd., resale, indust., dms., c.l., ex whse	gal.	.35	—
dms., l.c.l., ex whse	gal.	.39	—
tanks, works	gal.	20½	—
Coaltar pitch, aluminum, bulk, works.	ton.	44.00	—
Carbon and indust., bulk, works	ton.	44.00	—
Core, bulk works	ton.	40.50	—
Fiber, bulk works	ton.	48.00	—
Roofing, 140-155°F., Federal Specification RP-381 Type 1 tanks, works	ton.	41.00	—
Cobalt acetate 23.4% Co. dms., dlvd	lb	1.04	—
Cobalt blue, genuine, 250 lb bbls. dlvd E of Rockies	lb.	4.90	—
Cobalt blue prices 1c. higher W. of Rockies			
Cobalt blue imitation (see Ultramarine blue)			
Cobalt carbonate, 48% Co., powd., bgs., dlvd	lb.	1.45	—
Cobalt chloride, 24.2% Co., dms., dlvd	lb.	.93	—
Cobalt hydrate, 60-61% Co., dms., dlvd	lb.	1.97	—
Cobalt linoleate, fused 8½% Co., dms	lb.	.71½	—
Liq., 6% Co., dms	lb.	.57½	—
Cobalt metal, 99% dms. f.o.b. carrier	lb	1.50	—
Cobalt naphthenate liq. 6% Co., dms. dlvd	lb.	.48¾	—
Cobalt nitrate 20.1% Co. bbls. dlvd.	lb.	.75	—
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd E of Mississippi R.	lb	1.15	—
70-71% Co kgs. same basis	lb	1.12	—
Cobalt oxide prices W of Mississippi R 3c. per pound higher			
Cobalt phosphate powd., 32.1% Co., dms. dlvd	lb	1.35	—
Cobalt resinate, fused 3% Co. dms	lb.	.38½	—
Cobalt sulfate, cryst., 21% Co., dms., dlvd	lb	64	—
Monohydrated, 33% Co., dms., dlvd	lb	1.09	—
Cobalt tallate 6% Co., dms. dlvd.	lb	.44	—
Cocaine, USP cns., 100-oz lots, f.o.b works	oz.	17.50	—
Cocaine hydrochloride, cns. 100-oz lots f.o.b works	oz.	13 75	—
Cocillana bark bls	lb	18	.20
Cocoa butter, bgs.	lb.	.64	.69
Coconut oil crude tanks New York	lb.	.14	—
tanks, Pac. coast	lb.	.12¾	—
Refd. deodorized, dms	lb.	.19½	.20½
Coconut oil acids, dist., dms	lb.	.23½	.26
tanks	lb.	.21	—
double dist. (stripped), dms	lb	24½	.27
tanks	lb.	.22	—
Cod oil, dms. spot	lb.	08¾	.08½
Codeine, NF, cns., 100-oz. lots	oz.	13.25	—
Codeine hydrochloride cns., 100-oz. lots	oz.	11 75	—
Codeine phosphate USP, cns., 100-oz lots	oz.	10.25	—
Codeine sulfate USP cns. 100-oz. lots	oz.	10 75	—
Codliver oil, USP, dms	gal	1.40	1.70
Cohosh root, black bls	lb	20	.25
Blue bls	lb	20	.25
Colchicine USP bots	oz.	29 00	—
Colchicum root, bls	lb	.35	.45
Colchicum seed, bgs	lb	75	.80
Collodion, USP dms	lb.	.32½	—
USP flexible dms	lb.	.34	—
Colocynth pulp bls	lb	75	—
Colombo root bls	lb	16	.18
Condurango bark bls	lb	18	20
Congo copal gum, No 1, bgs	lb	.26	.27
No. 2, bgs	lb	23	.25
No. 3, bgs	lb.	.21	.24
Copaiba balsam, cns., dms	lb.	.65	1.10
Copaiba oil cns	lb	1.35	2.00
Copper acetate bbls, c.l., works	lb	53	—
bbls. l.c.l. works	lb	54	—
Copper carbonate, 55%, dark dense, works	lb.	34.85	—
bgs., l.c.l., works	lb.	36.35	—
Copper chloride, cupric, anhyd., dms., works	lb.	.44	.44½
cryst., dihydrate, dms., works.	lb.	.30	.30½
cryst., dried., dms., works	lb.	.38¼	.38¾
Copper chloride, cuprous, dms., works	lb.	.39¼	.42¼
Copper cyanide, tech., dms., 20,000-lb lots or more	lb.	.609	—
dms., 1,000-lb lots or more	lb.	.619	—
dms. smaller lots	lb	.639	.65
Copper gluconate dms	lb	3.20	—
Copper hydrate drv. dms. c.l., frt. E. of Miss	lb.	.52½	—
dms., l.c.l., same basis	lb.	.53	—
Copper metal, electrolytic dlvd Valley, basis	lb.	.30	—
Copper naphthenate liq., 8% Cu, dms. frt alld	lb.	.26½	—
Copper nitrate, tech., cryst., dms., works	lb.	.30¾	.32¼
Copper oleate, solid, 8% Cu. dms., works	lb.	.45	—
Copper oxide, black bbls 100-5,000-lb. lots, works	lb.	.46¼	—
Copper oxide, red 97% USN Type 1. bbls., 100-5,000-lb lots.	lb.	.47½	—
99% USN Type II, bbls. 100-5,000-lb lots or more, works	lb.	.46½	—
Copper quinolinolate, 18% Cu. dms., ton lots	lb	4.25	—
10% active quinolinolate dms	lb	1.14	1.15
Copper resinate, precip., dms frt. alld	lb.	.47	—
Copper sulfate, CP, gran., dms., works	lb.	.1065	—
Cryst., 99%, bgs., c.l., works, 100 lbs.		12.25	—
bgs., l.c.l., works	100 lbs.	12.75	-15.20
Monohydrated, 35%, dms., c.l., works	100 lbs.	23.00	—
dms., l.c.l., works	100 lbs.	23.75	—
Tribasic, distributors, bgs., c.l., works	100 lbs.	29.80	—
bgs., l.c.l., works	100 lbs.	31.10	—
Copper undecylenate, dms	lb	2.75	—
Copra, Atl., Gulf ports, c.i.f.	ton.	172.50	—
Pac. ports, c.i.f	ton.	167.50	—
Coriander oil, USP, bots.	lb.	7.25	8.75
Coriander seed, Moroccan, bgs.	lb.	.20	—
Rumanian, bgs.	lb.	.18	—
Yugoslavian bgs.	lb.	.08½	—
Corn oil, crude, tanks, works	lb.	.13¾	—
Foots (soapstock) acid, 95%, tanks, New York	lb.	.05¾	—
Refd., salad, dms	lb.	.1948-	.1975
tanks	lb.	.1748-	—
Corn oil acids, dist., dms	lb.	.14¾	.17¼
tanks	lb.	.12¼	—
Corn sugar, tanners, chipped, paper bgs. c.l. 60,000 lbs. min.	100 lbs.	7.30	—
paper bgs. l.c.l	100 lbs	7 45	—
Corn syrup, 43° Be., tanks, dlvd. N.Y.	100 lbs.	6.30	—
non-ret. dms., c.l., same basis.	100 lbs.	7.23	—
Corrosive sublimate (see Mercuric chloride)			
Cortisone acetate USP bots., kilo or more	gram	1.05	1.75
Costus oil, bots	oz	6.00	—
Cottonseed meal, 41%, bgs., Memphis	ton.	54.00	—
Cottonseed oil, crude, tanks, South, East	lb.	.10	.10¼
tanks, Valley	lb.	.09¾	—
tanks, Texas, Lubbock	lb.	.09¾	—
tanks, Texas, Waco	lb.	.09¾	.10
Foots (soapstock), acid, 95% tanks, Texas, Waco	lb.	.04	Nom.
Refd., salad, dms.	lb.	.15¾	.15¾
tanks	lb.	.13¾	.13¾
Cottonseed oil acids, dist., dms	lb.	.14¾	.17¼
tanks	lb.	.12¼	—
Coumarin NF, cryst. dms	lb	3.30	3.40
Cramp bark NF bls	lb	90	1.00
Cream of tartar (see Potassium bitartrate)			
Creosote carbonate NF bots, cbys.,	lb	3.05	3.50
Creosote, coaltar, crude, tanks, works, frt. adjusted gal.		.24	—
Crude, soln 80%, tanks, works	gal.	226	—
Refd., dms., c.l., works	gal.	50	—
dms., l.c.l., same basis	gal	62	—
tanks, same basis	gal	38	—
West Coast creosote prices computed on a basis of 24c per gallon for straight oil and 20c per gallon for coaltar			
Creosote, beechwood, cbys., dms., f.o.b works, dlvd. in Metropolitan area	lb.	1.72	1.77
Hardwood, NF cbys, dms, same basis	lb.	1.42	1.47
Pinewood dms, incl. c.l., works.	lb.	.0611-	—
dms, incl., l.c.l., works	lb.	.0684-	—
dms, incl., l.c.l. ex whse, New York	lb.	.0795-	—
tanks, works	lb.	.0511-	—
Creosote oil (see Creosote coaltar).			
Cresol, tech, 50% below 204°C., dry above 207°C., wide distillation range non-ret, dms., c.l., same basis	lb.	.18	—
non-ret dms., l.c.l. same basis,	lb.	.19	—
tanks, same basis	lb.	.16	—
m-Cresol, 95-98% dms., c.l., works,	lb.	.60	—
dms., l.c.l., works	lb.	.61	—
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald	lb.	.18	—
dms., l.c.l., same basis	lb.	.19	—
tanks, same basis	lb.	.16	—
2,97% 2°C. dms. c.l., frt. equald.	lb.	.22	—
dms., l.c.l., same basis	lb.	.23	—
tanks, same basis	lb.	.20	—
o-Cresol, 30.5°C. m.p and over, ret., dms. c.l., frt equald	lb.	.17	—
ret. dms., l.c.l., same basis	lb.	.18	—
tanks, same basis	lb.	.15	—
30°-30.49°C m.p., dms., c.l., frt. equald	lb.	.16½	—
ret. dms., l.c.l., same basis	lb.	.17½	—
tanks, same basis	lb.	.14½	—
o-Cresol, 30.5°C m.p and over, ret.,			
Cresol, 29°-29.9°C, m.p., dms., c.l., frt equald	lb.	.16	—
ret. dms., l.c.l., same basis	lb.	.17	—
tanks, same basis	lb.	.14	—
25°-28°C m.p., dms. c.l., frt. equald	lb.	.15	—
ret. dms. l.c.l., same basis	lb.	.16	—
tanks, same basis	lb.	.13	—
p-Cresol, 98%, dms., c.l., dlvd	lb.	.52	—
dms., l.c.l., dlvd	lb.	.53	—
tanks, dlvd	lb.	.49	—
2,3-Cresotic acid dms., ton lots, works	lb.	.70	—
dms., smaller lots, works	lb.	.72	—
p-Cresyl methyl ether, cns	lb.	1.80	2.03
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades dms., c.l., t.l., frt equald	gal.	1.35	—
dms., l.c.l., same basis	gal.	1.40	—
tanks, same basis	gal.	1.15	—
metapara content 25% or less, dms., c.l., t.l., same basis	gal.	1.20	—
dms., l.c.l., same basis	gal.	1.25	—
tanks, frt equald	gal.	1.00	—
Cresylic acid, coaltar, imp., meta-para content 25% or less, f.o.b. works, frt. equald, to competitive points, 50 dms. or more.	gal.	1.03½	—
less than 50 dms., same basis	gal.	1.05	1.15
tanks, same basis	gal.	1.00	—
Crotonaldehyde, 91-93%, dms., l.c.l., works	lb.	.25	—
Crotonic acid, dms., 200 lbs. or more, l.c.l., dlvd	lb.	.36	—
Cryolite, nat., indust., bgs., c.l., works	100 lbs.	13.00	—
bgs., l.c.l. works	100 lbs.	14.25	—
Cube root, powd., 5% rotenone, bgs., t.l., works	lb.	21	—
bgs., l.t.l., works	lb.	22	—
Cubeb berries, NF, bgs.	lb.	1.00	—
Powd., cs.	lb.	1.15	—
Cubeb oil, cns.	lb.	9.00	-12.00
Cumene, dms., c.l., works	lb.	.12	—
dms., l.c.l., works	lb.	.14	—
tanks, works	lb.	.11	—
Cumin seed, Iranian, bgs.	lb.	.20	—
Moroccan, bgs.	lb.	.36	—
Turkish, bgs.	lb.	.19	—
Cumin seed oil, bots., cns.	lb.	15.50	-17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract.	ton	37.00	—
Fertilizer, pulv., 21% N, bgs., works unit	ton.	2.85	—



COÖPERATION

Close coöperation with clients on all stages of manufacture and marketing is a vital part of the Cyanamid Fine Chemicals Department service. Cyanamid's 50 plants and 30,000 skilled employees represent this coöperation and production capacity. Your Fine Chemicals Department representative is always ready to bring you close technical assistance of the highest calibre. If you have "problems"... in formulation, stability, or new product development ... the Fine Chemicals Department representative is the man to contact.

Vitamins, sulfonamides, antibiotics, intrinsic factor concentrate and other bulk pharmaceuticals. Complete custom synthesis service.

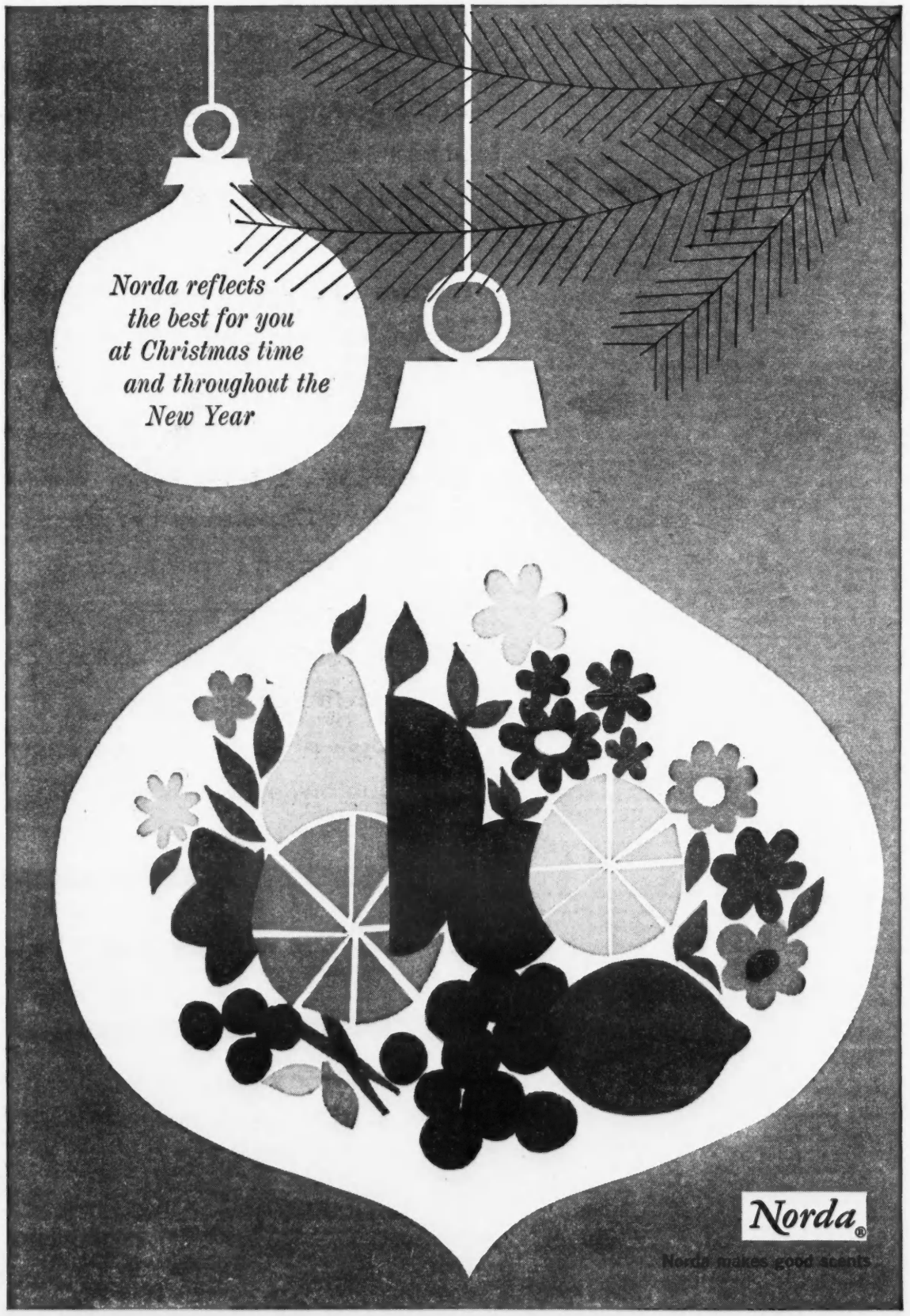
CYANAMID

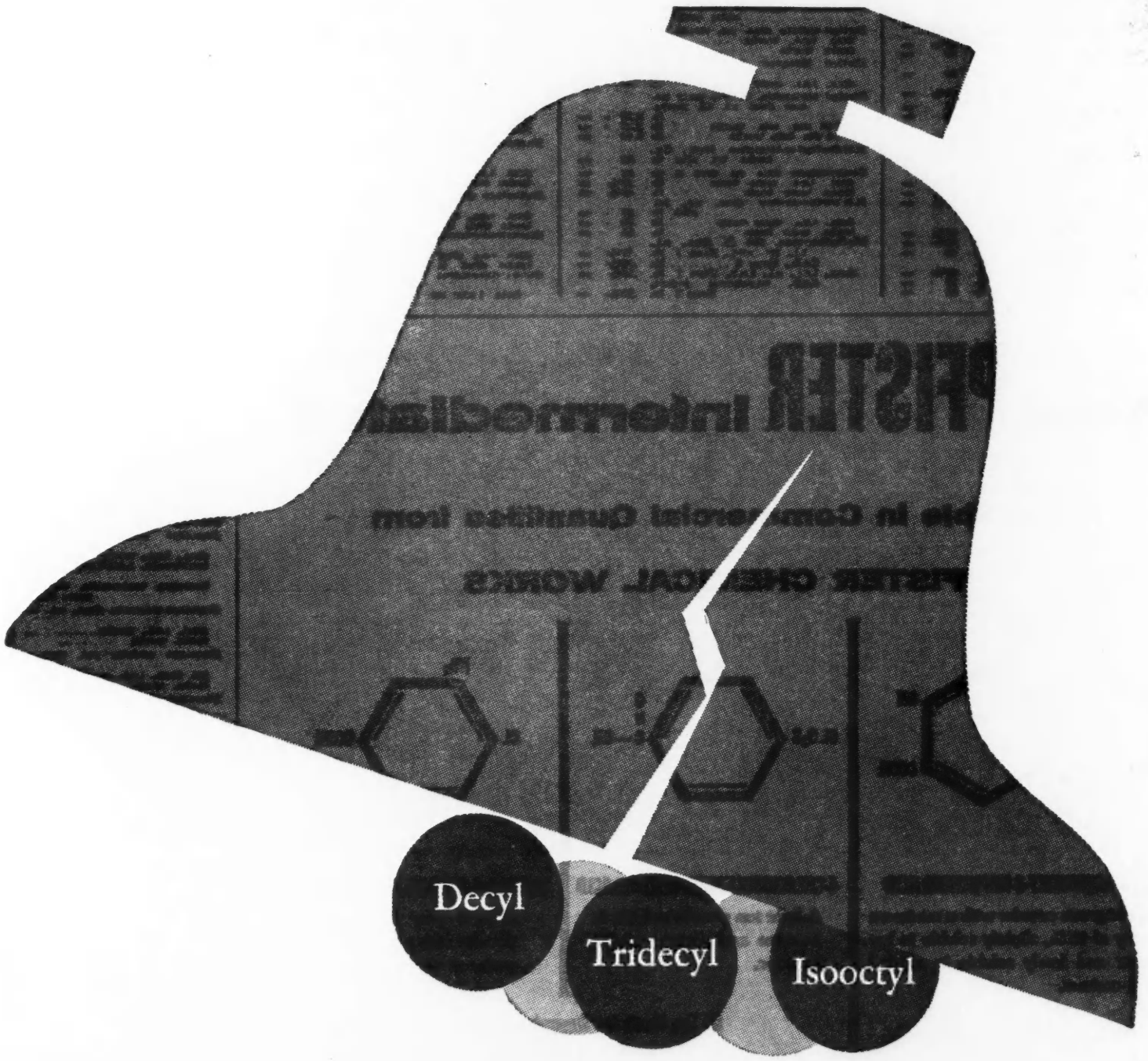
AMERICAN CYANAMID COMPANY
FINE CHEMICALS DEPARTMENT
30 Rockefeller Plaza, New York 20, N. Y.

Cyanamide, tertilizer, ndust grade, bgs, c.l., works ton 75.00 - —
bgs., l.c.l., works ton 96.00 - —
Indust grade 6-16 mesh, dms., c.l. works ton 120.00 - —
dms. l.c.l. works ton 140.00 - —
Cyclohexane 99% tech. dms. c.l., dlvd E of Rockies gal 1.02 - —
dms. l.c.l same basis gal 1.10 - —
dms. c.l. dlvd W of Rockies gal .77 - —
dms., l.c.l., same basis gal .85 - —
tanks, works gal .55 - —
98% tech 40-dm lots or more, f.o.b works gal .56 - —
5-39 dms. same basis gal .60 - —
tanks same basis gal .36 - —
Cyclohexanol tech., dms. c.l., works frt alld E lb .28½ - —
dms. l.c.l. works same basis lb .29½ - —
tanks works, same basis lb .26 - —
Cyclohexanone tech. dms., c.l., works lb .33½ - —
dms., l.c.l. works lb .34½ - —
tanks works lb .31 - —
Cyclohexylamine, tech., dms., c.l., works lb .49 - —
dms., l.c.l., works lb .50 - —
tanks, works lb .47 - —
Cypress oil, bots. lb 9.30 - —

D

2,4-D tech., bgs., dms., c.l., works, frt. equald lb .40 - —
bgs., dms., l.c.l., same basis lb .45 - .49
2,4-D butyl ester, dms., c.l., works lb .43 - —
dms., l.c.l., same basis lb .48 - .52
tanks, same basis lb .42 - —
2,4-D isopropyl ester, dms., c.l., works lb .43 - —
dms., l.c.l., works lb .48 - .52
tanks, works lb .42 - —
Dammar gum Batavia, A E. cs lb No stocks.
East India, Batu, bold, bgs lb .15½ - .18
nubs and chips, bgs. lb .10 - .11
black, bold, bgs lb .15½ - .18
nubs and chips, bgs. lb .12¼ - .13½
unscraped, bgs. lb .13 - .14½
pale, chips, bgs. lb .15 - .17
pale, nubs, bgs. lb 20¾ - .24
Siam, cs. lb .31½ - .34
Singapore, No. 1, bgs lb .35 - .40
No 2, bgs. lb .29 - .32
dust, bgs. lb .18 - .20
No 3, bgs. lb No stocks.
Dandelion root, bls lb .35 - .40
DDD, tech., flake, grd., fib dms., c.l., works lb .45 - .47
fib. dms., l.c.l., works lb .46 - .48
DDT, flake or lump, bgs., c.l., dlvd lb .23 - —
bgs., smaller lots, same basis lb .25 - —
fib dms., c.l., same basis lb .24 - —
fib dms., smaller lots, same basis lb .26 - —
Powdered DDT 1c. per pound higher.
DDVP (see Dimethyl dichlorovinyl phosphate).
l-Decanol, tech., dms., c.l., dlvd. E. lb .43½ - —
dms., l.c.l., dlvd. E. lb .45½ - —
tanks, dlvd. E. lb .41 - —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb .23½ - —
dms., l.c.l., dlvd. lb .25 - —
tanks, dlvd. lb .21 - —
Perfume grade, bots. lb 1.00 - 2.00
Decyl alcohol, normal (see l-Decanol)
Deertongue leaves, bls. lb .55 - .60
Defluorinated phosphate, feed grade, 14% P, paper bgs., c.l., t.l., Tupelo, Miss ton 57.07 - —
18% P, paper bgs., c.l., works ton 66.25 - 81.00
19% P, paper bgs., c.l., t.l., works, Houston, Tex ton 74.35 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.
Degras, common (15-17% free fatty acid), 400-lb. dms lb. .12 - .14
Neutral (over 2% free fatty acid), 400-lb. dms lb. 13 - —
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd. E. of Rockies, gal .69½ - —
dms., l.c.l., same basis gal .74½ - .80½
tanks, dlvd. same basis gal .53½ - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies gal .72 - —
dms., l.c.l., same basis gal .77 - .83
tanks, same basis gal .56 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd E. of Rockies gal .70¼ - —
dms., l.c.l., same basis gal .75½ - .81½
tanks, same basis gal .54½ - —
SD2B, dms., c.l., dlvd. E. of Rockies gal .69 - —
dms., l.c.l., same basis gal .74 - .80
tanks, same basis gal .53 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal .68 - —
dms., l.c.l. same basis gal .73 - .79
tanks, same basis gal .52 - —
Denatured alcohol, ethyl, SD23A, dms., c.l., dlvd. E. of Rockies gal .70½ - —
dms., l.c.l., same basis gal .75½ - .81½
tanks, same basis gal .54½ - —
Denatured alcohol, ethyl, SD23H, dms., c.l., dlvd. E. of Rockies gal .71 - —
dms., l.c.l., same basis gal .76 - .82
tanks, same basis gal .55 - —
Denatured alcohol, SD29, dms., c.l., dlvd. E. of Rockies gal .69½ - —
dms., l.c.l., same basis gal .74½ - .80½
tanks, same basis gal .53½ - —
SD30, dms., c.l., dlvd. E. of Rockies gal .68 - —
dms., l.c.l., same basis gal .73 - .79
tanks, same basis gal .52 - —
Denatured alcohol, ethyl, SD-35A, dms., c.l., dlvd. E. of Rockies gal .71 - —
dms., l.c.l., same basis gal .76 - .82
tanks, same basis gal .55 - —
Denatured alcohol, ethyl, SD-40, dms., dlvd. E. of Rockies gal .70½ - —
dms., l.c.l., same basis gal .75½ - .81½
tanks, same basis gal .54½ - —
For anhyd. alcohol on above formulas prices are 7c. per gal. higher
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.
d-Desoxyephedrine hydrochloride, dms lb. 15.00 - 17.00
dl-Desoxyephedrine hydrochloride, dms lb. 6.50 - —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.19 - —
100 lbs. 9.34 - —
canary dark, paper bgs., c.l. 100 lbs. 9.03 - —
paper bgs., l.c.l. 100 lbs. 9.18 - —
Indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 8.93 - —
paper bgs., l.c.l. 100 lbs. 9.08 - —
white paper bgs., c.l. 100 lbs. 8.77 - —
paper bgs., l.c.l. 100 lbs. 8.92 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs higher
Dextrose, anhyd., coml., bgs., c.l. 100 lbs. 8.65 - —
bgs. l.c.l. 100 lbs. 8.80 - —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms 100 lbs. 14.70 - —
100-lb. dms. 100 lbs. 15.20 - —
Hydrated, coml., bgs., c.l., ex whse 100 lbs 7.45 - —
bgs. c.l., ex whse 100 lbs. 7.60 - —
USP dms. lb. .19¾ - —
Diacetone alcohol, acetone-free, dms., c.l., dlvd lb. .15½ - —
dms., l.c.l., dlvd. lb. .17 - —
tanks, dlvd lb. .13 - —
Tech. dms. c.l., dlvd. lb. .15 - —
dms., l.c.l., dlvd. lb. .16½ - —
tanks, dlvd lb. .12½ - —
Diacetyl, flavor grade, bots. lb. 3.30 - 4.30
Di-sec-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l. works lb. .33 - —
tanks, works lb. .29½ - —
Di-tert-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½ - —
Diallylamine, dms., c.l., dlvd. lb. .98½ - —
dms., l.c.l., dlvd. lb. 1.00 - —
tanks, dlvd. lb. .96 - —
o-Dianisidine dry, tech., fib. dms. lb. 2.00 - —
Dibenzyl sebacate, dms., c.l., works. lb. .93 - —
dms., l.c.l., same basis lb. .94 - —
tanks, same basis lb. .91 - —
Dibromobenzene, bgs., 500-lb. lots. lb. .55 - —
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., dlvd. lb. .65 - —
l.t.l., dms., same basis lb. .68 - —
Food grade, c.l., t.l., dms., dlvd. lb. .65 - —
dms., l.t.l., same basis lb. .68 - 1.10
Tech., dms., c.l., t.l., dlvd. lb. .57 - —
dms., l.c.l., same basis lb. .60 - —
tanks, same basis lb. .54 - —
Dibutyl fumarate, dms., c.l., t.l., dlvd. E lb. .31½ - —
dms., l.c.l., l.t.l., dlvd. E lb. .33 - —
tanks, dlvd E lb. .29 - —
Dibutyl maleate, dms., c.l., t.l., dlvd. E lb. .31½ - —
dms., l.c.l., l.t.l., dlvd. E lb. .33 - —
tanks, dlvd. E lb. .29 - —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .31 - —
dms., l.c.l., same basis lb. .32½ - —
tankcars, tanktrucks, 2,000 gals., same basis lb. .28½ - —
tanktrucks, 1,000-1,999 gals., same basis lb. .29 - —
Dibutyl sebacate, dms., c.l., works. lb. .67½ - —
dms., l.c.l., works lb. .68½ - —
tanks, works lb. .65½ - —
Dibutyl tartrate, dms., works, frt. alld lb. .65½ - —
Dibutylamine, dms., c.l., dlvd lb. .55½ - —
dms., l.c.l., same basis lb. .57 - —
tanks, same basis lb. .53 - —
Dicapryl phthalate, dms., c.l., dlvd. lb. .28½ - —
dms., l.c.l., dlvd. lb. .30 - —
tanks, dlvd. lb. .26 - —
Dicapryl sebacate, dms., c.l., works. lb. .63 - —
dms., l.c.l., works lb. .63½ - .64
tanks, works lb. .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —
3,4-Dichloroaniline, tech., solid, tanks, frt. alld lb. .73 - —
o-Dichlorobenzene, dms., c.l., trt. alld. E lb. .12¾ - —
dms., l.c.l., same basis lb. .13¾ - —
tanks, same basis lb. .11 - —
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld. E lb. .12 - —
dms. 2,000 lbs. or more same basis lb. .14½ - —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½ - —
dms., l.c.l., or l.t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E lb. .15½ - —
dms., l.c.l., l.t.l., same basis lb. .17 - —
tanks same basis lb. .13 - —
Dichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .65 - —
dms., l.c.l., same basis lb. .75 - —
Dichloropentanes dist., dms., c.l., works lb. .05 - —
dms., l.c.l., works lb .06 - —
tanks works lb .03 - —
Dichlorophenoxyacetic acid (see 2,4-D).





Soon . . . oxo alcohols from Gulf's new plant at Philadelphia

When Gulf's new Philadelphia oxo plant goes on stream early next year, you will have a new source of *isooctyl, decyl and tridecyl* alcohols —today's key building blocks for vinyl plasticizers, detergents, synthetic lubricants and countless other exciting new products.

This facility was designed to produce all three of these oxo alcohols to standards that have made Gulf petrochemicals pacemakers in the industry. The plant's strategic location means faster deliveries to your doorstep . . . its capacity can supply your largest volume needs.

So, however you make or use any kind of alcohol-based product, you'll find Gulf's expanded oxo alcohol capacity much to your liking. You can get additional information at our Sales Office, 360 Lexington Avenue, New York 17, New York.

GULF

Quality Petrochemicals to Begin with

Benzene • Cyclohexane • Ethylene • Oxo Alcohols • Propylene • Propylene Trimer and Tetramer • Sulfur • Toluene

Petrochemicals Department, Gulf Oil Corporation, Pittsburgh, Pennsylvania

Dicyclohexylamine dms. c.l., works lb. 54 - —
dms. l.c.l. works lb. 55 - —
tanks works lb. 52 - —
Dicyclohexyl phthalate, gran., fib. dms c.l. works frt alld. lb. .47½- —
fib. dms., l.c.l., same basis lb. .49 - —
Dicyclopentadiene dms. c.l., f.o.b works lb 14½- —
dms. l.c.l. same basis lb. 14¾- —
tanks same basis lb. .12 - —
Didecyl phthalate dms. c.l. works. lb 28½- —
dms. l.c.l. same basis lb 30 - —
tankcars tanktrucks, 2,000 gals. lb 26 —
tanktrucks 1,000-1,999 gals, same basis lb 26½- —
Dieldrin, dms. c.l. divd. lb 1.85 —
dms. l.c.l divd lb 1.90 —
Diethanolamine dms. c.l., divd E. lb 27 —
dms. l.c.l. same basis lb 28½- —
tanks same basis lb 24½- —
Diethanolamine lauryl sulfate, dms., c.l. frt alld lb 27½- —
dms. l.c.l. frt alld. lb 28½ —
tanks frt alld lb. 26½- —
Diethyl barbituric acid (see Barbital)
Diethyl carbonate dms. c.l. f.o.b. works lb 47½- —
dms. l.c.l., same basis lb. 48½- —
tanks same basis lb 45 —
Diethyl ethanolamines, dms. c.l., divd lb. 69½- —
dms. l.c.l., divd. lb 71 - —
tanks divd lb. .67 - —

Diethyl oxalate dms., c.l., f.o.b. works lb. 42¼- —
dms., l.c.l. same basis lb 43½- —
tanks same basis lb. 40 - —
Diethyl phthalate dms., c.l., divd. lb. 27½- —
dms. l.c.l., divd. lb. 29 - —
tanktrucks, 1,000-1,999 gals, same basis lb. 26½- —
tankcars, tanktrucks, 2,000-lb lots, same basis lb. 26 —
Diethyl sulfate dms. c.l., works lb. 19½- —
dms. l.c.l., works lb. 20¼- —
tanks works lb. 17½- —
Diethyl thiourea dms. c.l., t.l., works lb 58 - —
dms. l.c.l., same basis lb. 59 - —
Diethyl toluamide, 90-95% meta isomer dms. c.l. t.l. works. lb 2.30 - —
5-44 dm. lots works lb 2.35 - —
1-4 dm. lots, works lb 2.40 - —
N,N-Diethyl-m-toluidine tech., liq., tanks, frt. alld lb. .83 - —
Diethylamine dms. c.l. divd E lb. .52 - —
dms. l.c.l., same basis lb 53½- —
tanks same basis lb 49½- —
N,N Diethylaniline dms., c.l., frt. alld lb. 57 - —
dms., l.c.l., same basis lb 58 - —
tanks same basis lb 55 - —
Diethylbenzene, 380 lb. dms., c.l., t.l., frt alld., Zone 1 lb. 17½- —
f.o.b., Zone 2 lb. .18½- —
dms., l.c.l., c.l., f.o.b. Zone 1 lb. .19½- —
f.o.b. warehouse points, Zone 2 lb. .20½- —

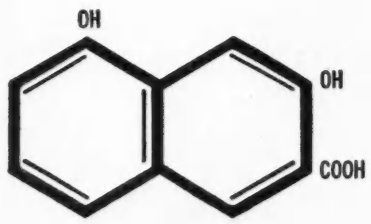
Diethylbenzene, tankcars, Zone 1 lb. .18 - —
Zone 2 lb. .16 - —
Zone 1 is East of the Rockies. Zone 2, West of the Rockies.
Di-2-ethylhexyl adipate (see Di-iso-octyl adipate).
Di-2-ethylhexyl phthalate (see Di-iso-octyl phthalate).
Diethylene glycol dms. c.l., divd. E. lb. .17¾- —
dms., l.c.l., same basis lb. .19¼- —
tanks same basis lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .51½- —
dms. l.c.l., works lb. .52¼- —
Diethylene glycol monobutyl ether, c.l., dms., works lb. .30¾- —
dms. l.c.l., works lb. .32¼- —
tanks divd E lb. .28¼- —
Diethylene glycol monobutyl ether acetate dms., c.l., works. lb. .30¾- —
dms., l.c.l. works lb. .31½- —
tanks divd E lb. .28¾- —
Diethylene glycol monoethyl ether, dms., c.l., divd lb. .22½- —
dms., l.c.l., divd lb. .24 - —
tanks divd E lb. .20 - —
Diethylene glycol monoethyl ether acetate dms., c.l., works. lb. .27¼- —
dms. l.c.l., works lb. .28 - —
tanks, works lb. .25¼- —
Diethylene glycol monomethyl ether, dms. c.l., divd lb. .21 - —
dms. l.c.l., divd lb. .22½- —
tanks divd E lb. .18½- —
Diethylenetriamine, dms., c.l., divd, E lb. .44 - —
dms. l.c.l. divd E. lb. .45½- —
tanks, divd E. lb. .41½- —
Diethylstilbesterol, USP, bots. 10-kilo lots kilo 100.00 147.50
bots. 1 kilo lot kilo 110.00 152.50

Digitalis leaves, USP, dom., dms lb 1.20 - —
Digitoxin USP bots. gram 4.20 - —
Diglycol laurate, dms., ton lots. lb. .32½- —
Diglycol stearate, dms., t.l. lb. .26 - —
Diglycolic acid, bgs., c.l., t.l., works. lb. .15½- —
bgs., l.c.l., works lb. .16 - —
Dihexyl sebacate, dms., c.l., works. lb. .66 - —
dms., l.c.l., works lb. .67 - —
tanks, works lb. .64 - —
Dihydrazine sulfate, dms., works lb 1.10 1.25
Dihydrostreptomycin sulfate, bulk. gram .03 - —
1,2-Dihydroxy anthraquinone, dms., works lb. 3.45 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 - —
Tech., dms., 20,000 lbs or more lb 1.11 - —
dms. 1,050 lbs to 20,000 lbs. lb 1.13 - —
dms. 150 lbs to 1,050 lbs lb 1.15 - —
Di-isobutyl ketone, dms., c.l. divd. lb. .17 - —
dms., l.c.l., divd. lb. .18½- —
tanks divd lb. .14½- —
Di-isobutyl phthalate, dms., c.l., divd E. lb .31½- —
dms. l.c.l., same basis lb. .32½- —
tanks, same basis lb. 29 —
Di-isobutylene dms. c.l., divd. E lb. .10 —
dms. l.c.l., divd E. lb. .11½- —
tanks, divd E lb .08 —
Di-iso octyl phthalate, dms., c.l., works lb. .28½- —
dms. l.c.l., same basis lb .30 —
tanktrucks, 1,000-1,999 gals., works lb. .26½- —
tankcars, tanktrucks, 2,000 gals., works lb. .26 - —
Di-iso-octyl sebacate, dms., c.l., works lb .62 —
dms., l.c.l., works lb. .61¼- —
tanks works lb 60 —
Di-isopropanolamine, dms., c.l., divd. lb. 23¼ —
dms., l.c.l., same basis lb. 24¾- —
tanks, same basis lb. 20¾- —
Di-isopropylamine dms., c.l., divd. E. of Rockies lb. .50½- —
dms., l.c.l., same basis lb. .52 —
tanks, same basis lb. 48 —
Dillweed oil, dom., bots., dms lb. 5.25 - —
Dimethyl anthranilate, cns lb 4.15 - —
Dimethyl dichlorovinyl phosphate, 55-gal dms., divd lb. 3.50 —
Dimethyl ethanolamines, anhyd., dms., c.l. divd lb. 1.225 - —
dms., l.c.l., divd. lb. 1.235 - —
tanks, divd. lb. 1.20 - —
70% dms., c.l., divd., 100% basis, contained amines lb. .68½- —
dms., l.c.l., divd., 100% basis. lb. .69½- —
tanks, divd., 100% basis lb. .66 —
Dimethyl hydroquinone, dms. lb. 1.90 2.20
Dimethyl phthalate, dms., c.l., works lb. .29 - —
dms., l.c.l., works lb. .30½- —
tanktrucks, 1,000-1,999 gals., same basis lb. .27 - —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26½- —
Dimethyl sebacate, dms., c.l., works. lb. 1.31 - —
dms., l.c.l., works lb. 1.30 - —
tanks, works lb. 1.28 —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½- —
ret. dms., l.c.l., works lb. .18½- —
tanks, works lb. .16½- —
Dimethyl sulfide, dms., c.l., works. lb. .18 —
dms., l.c.l., works lb. .18½- —
tanks, works lb. .15 - —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 —
dms., l.c.l., frt equald. 100% basis lb. .38½- —
tanks, frt. equald, 100% basis. lb. .28 —
40% soln., dms., c.l., frt. equald. 100% basis lb. .35 - —
dms., l.c.l., frt. equald. 100% basis lb. .35½- —
tanks, frt. equald, 100% basis. lb. .28 —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. 28 - —
dms., l.c.l., same basis lb. 29 - —
tanks, same basis lb. 26 - —
N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32½- —
dms., l.c.l., works lb. .33 .34
tanks, works lb. .30 - —
2,4-Dinitroaniline, dms., frt. alld lb. .75 - —
Dinitroaniline orange toner, CP, bbls., divd. E. of Rockies. lb 1.56 —
Dinitroaniline orange toner prices 1c higher W of Rockies.
m-Dinitrobenzene, 89°C., dms. lb. .26 —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld E lb. .17¼- —
dms., l.c.l., frt. alld. E. lb. .17¾- —
tanks, frt. alld. E. lb. .17 - —
2,4-Dinitrophenol bbls. lb. .41 - —
2,4-Dinitrotoluene, oil, dms. lb. .11 - —
Refd. 63°C. dms. lb. .23 - —
Dioctyl adipate, dms., c.l., works lb. .42½- —
dms., l.c.l., works lb. .43½- —
tanks, works lb. .40 —
Dioctyl phthalate, dms., c.l., frt. alld lb. 28½- —
dms., l.c.l., frt. alld lb. .30 —
tanktrucks, 1,000-1,999 gals. same basis lb. .26½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 - —
Dioctyl sebacate, dms., c.l., works. lb. .61¼- —
dms., l.c.l., works lb. .62¼- —
dms., l.c.l., works lb. .62¼ —
tanks, works divd. lb. .59¼- —
1,4-Dioxane, dms., c.l., divd. E lb. .41½- —
dms., l.c.l., divd E lb. .33 - —
tanks, divd E lb. .29 —
Prices in the west are 2c. per lb. higher.
Dipentaerythritol, bgs. c.l. t.l., divd. E lb. .34 - —
bgs., l.c.l., t.l., divd. E lb. .35 - —
Dipentene, dest.-dist., dms., c.l., works gal. .58 - —
dms., l.c.l., works lb. .62 - —
dms., l.c.l., ex whse. gal. .78 - —
tankscars, works gal. .41 - —
Steam dist., dms., c.l., works, South gal .72 - —
dms., l.c.l., divd. New York gal. .91 - —
tanks, works, South lb. .55 - —
Dip oil (see Tar acid oil).
Diphenolic acid, 1,000-lb. or more, bgs., works lb. .75 - —
Diphenolic polyether acids, 1,000-lb. or more, bgs., works lb. 1.00 —
Diphenyl, bgs., c.l. t.l., works lb. .16¾- —
bgs., l.c.l., works lb. .18½- —
tanks, works lb .15¼ —
Diphenyl oxide perfume grade cns. lb. .55 .70
Diphenyl phthalate dms., c.l., works. lb. .52 - —
dms., l.c.l., works lb. .54 - —
Diphenylamine, refd., flake, bgs. c.l., works frt. equald lb. .32 —
bgs., l.c.l., same basis lb. .34 —
Refd., fused tanks same basis lb. .29 —
Refd. diphenylamine in dms., ½c. per lb. higher.

new PFISTER intermediates

Available in Commercial Quantities from

PFISTER CHEMICAL WORKS

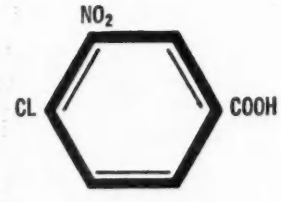


2, 8-DIHYDROXY-3-NAPHTHOIC ACID

A light green powder with a minimum purity of 95%, slightly soluble in hot water and freely soluble in alcohol and acetone.

4-CHLOROSULFONYL-BENZOIC ACID

A light tan powder soluble in benzene and slightly soluble in ether.



3-NITRO-4-CHLORO-BENZOIC ACID

A light gray to white powder with a minimum purity of 98.5%.

All The Above Are Suggested As Potential Building Blocks For A Host of Organic Chemical Compounds.

OTHER NEW PFISTER INTERMEDIATES NOW AVAILABLE

2, 4-Dimethoxy-5-Chloro-Aniline	Terephthaloyl-Bisacetic Ester
3-Amino-4-Methoxy-Benzanilide	5-Chloro-Salicylic Acid
3-Nitro-4-Methoxy-Benzanilide	2-Hydroxy-1', 2',-Benzocarbazole-3-Carboxylic Acid
2, 4-Dimethoxy-5-Chloro-Nitrobenzene	2-Amino-5-Chloro-Toluene
Salicylanilide	2, 4, 5-Trichloro-Nitrobenzene
5-Chloro-Salicylanilide	Beta Naphthylamine
3-Nitro-4-Chloro-Benzanilide	N'-Diethyl-3-Amino-4-Methoxy-Benzene-Sulfonamide
Terephthaloyl-Benzoic Acid	Aconitic Acid

This is the second in a series of advertisements featuring Pfister Intermediates. For further information, samples and catalog listing numerous other intermediates write or phone us at **WHitney 5-5400**

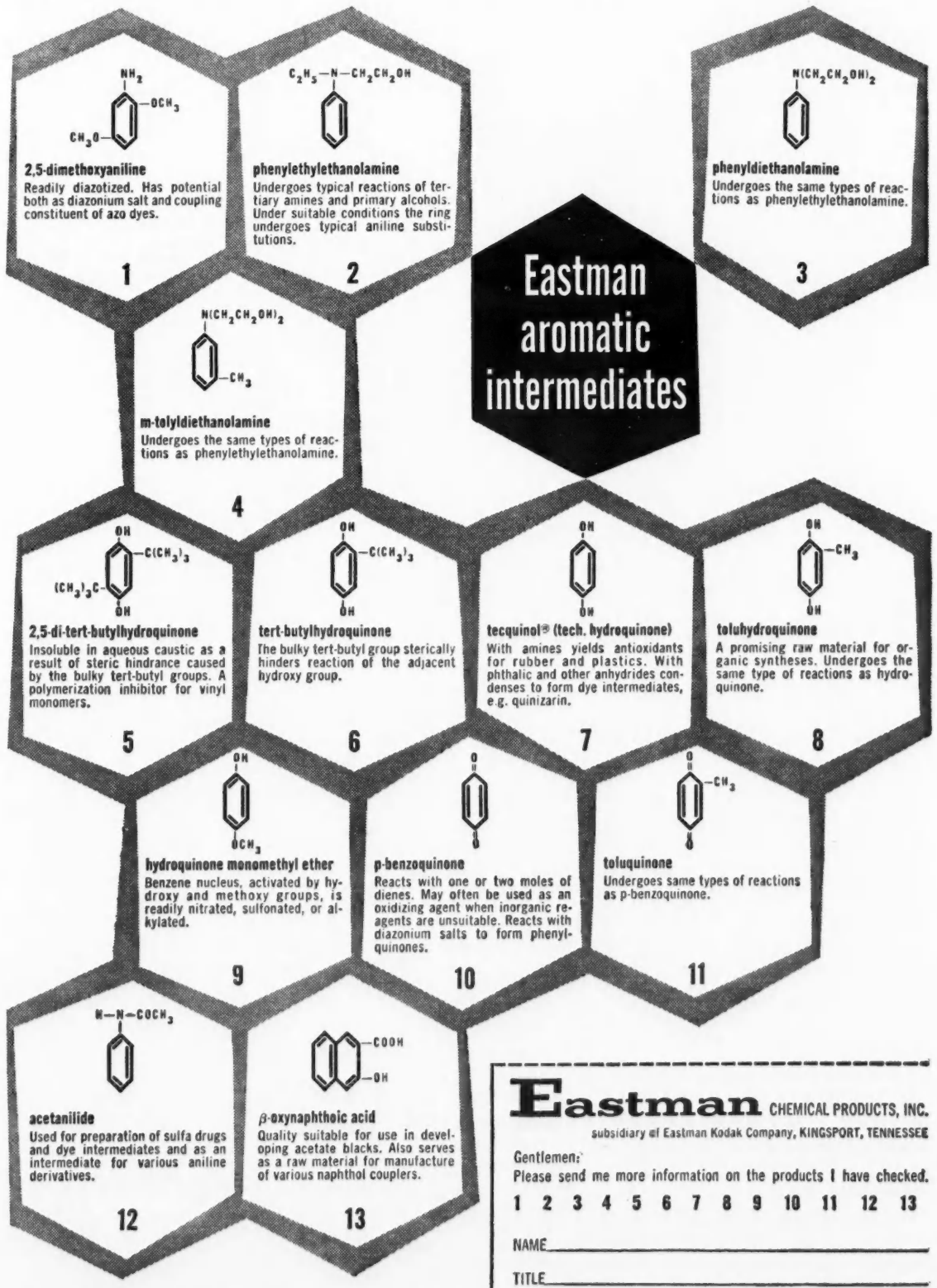
Pfister Chemical Works INC.
RIDGEFIELD, NEW JERSEY

Diphenylguanadine bgs., dms., ton lots, frt. alld. lb. .51 - —
bgs., smaller lots, frt. alld. lb. .52 - —
Diphenylhydantoin-sodium, USP, dms lb. 5.00 - 5.60
Dipropylene glycol, dms., c.l., frt. alld lb. .17 - —
dms., t.c.l., frt. alld. lb. .18½- —
tanks, frt. alld. lb. .14¼- —
Dipropylene glycol methyl ether, dms., c.l., dlvd. E lb. .20 - —
dms., t.c.l., same basis lb. .21½- —
tanks, same basis lb. .18½- —
Dithiodibenzoic acid dms., 1,000-lb lots, works lb. 1.80 - —
Di-o-tolylguanidine dms., ton lots, frt. alld. lb. .71 - —
dms., smaller lots, frt. alld. lb. .72 - —
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt alld lb. .55 - —
Divinylbenzene, 20-25% dms., c.l., works, frt equald lb. .20 - —
dms., t.c.l., same basis lb. .21 - —
tanks, same basis lb. .19 - —
50-60% dms., c.l., works, 100% basis lb. 1.00 - —
dms., t.c.l., works, 100% basis, lb. 1.05 - —
tanks, same basis lb. .90 - —
Dodecenyl succinic anhydride, dms., c.l., t.l., dlvd E lb. .75 - —
dms, t.c.l., t.t.l., same basis lb. .76 - —
Dodecylbenzene, dms., c.l., f.o.b., works, frt equald lb. .134 - —
dms, t.c.l. same basis lb. 144 - —
tanks, same basis lb. .11½- —
Dodecylphenol c.l., frt. alld. lb. .22½- —
dms., t.c.l., same basis lb. .23½- —
tanks, same basis lb. .20 - —
Dodecylphenol prices on shipments to Western States are 2c per pound higher

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd.:
Blue, FD&C, No. 1 lb. 15.65 - 17.60
No. 2 lb. 15.65 - 17.60
Green, FD&C, No. 1 lb. 15.65 - 17.60
No. 2 lb. 19.60 - 22.85
No. 3 lb. 31.30 - 35.99
Red, FD&C, No. 2 lb. 3.30 - 4.10
No. 3 lb. 19.60 - 22.85
No. 4 lb. 5.55 - 7.50
Dyes, coaltar, certified colors for drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd.:
Violet, FD&C, No. 1 lb. 15.65 - 17.60
Yellow, FD&C, No. 1 lb. 9.15 - 11.05
No. 5 lb. 3.30 - 4.10
No. 6 lb. 3.30 - 4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:
Black, D&C, No. 1 lb. 10.50 - 10.95
Brown, D&C, No. 1 lb. 15.65 - 16.10
Green, D&C, No. 5 lb. 15.65 - 16.10
No. 6 lb. 15.65 - 16.10
No. 7 lb. 14.35 - 14.80
Orange, D&C, No. 3 lb. 10.50 - 10.95
No. 4 lb. 19.60 - 20.05
No. 5 lb. 3.80 - 4.25
Red, D&C, No. 17 lb. 10.50 - 10.95
No. 18 lb. 23.60 - 24.00
No. 19 lb. 15.00 - 15.45
No. 21 lb. 3.90 - 4.35
No. 22 lb. 10.50 - 10.95
No. 28 lb. 24.15 - 24.65
No. 33 lb. 17.00 - 17.45
Violet, D&C, No. 2 lb. 15.65 - 16.10
Yellow, D&C, No. 7 lb. 10.50 - 10.95
No. 9 lb. 10.50 - 10.95
No. 10 lb. 13.05 - 13.50
No. 11 lb. 13.05 - 13.50
Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots, dlvd.:
Blue, Ext., D&C, No. 1 lb. 15.65 - 16.10
Green, Ext., D&C, No. 1 lb. 15.65 - 16.10
Red, Ext., D&C, No. 1 lb. 13.05 - 13.50
Yellow, Ext., D&C, No. 1 lb. 10.50 - 10.95
Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd. No.
11110 Brilliant scarlet BN lb. 1.79 - —
13390 Fast blue SR lb. 1.43 - —
14025 Yellow 2G lb. 1.26 - —
14030 Orange R, extra, conc. lb. 1.64 - —
14645 Chrome black F lb. .77 - —
14720 Rubine XX, conc. lb. 1.59 - —
15510 Orange Y, extra conc. lb. .83 - —
15575 Orange RR lb. .99 - —
15620 Fast Red A, conc lb. 1.61 - —
15705 Chrome blue black R, conc. lb. 1.12 - —
16150 Scarlet 2RL lb. 1.22 - —
16255 Brilliant scarlet 3RN, conc. lb. 1.26 - —
16230 Fast light, orange 2G lb. 1.39 - —
17590 Brown PG lb. 3.09 - —
18050 Phloxine 2G lb. 1.05 - —
18055 Fuchsine 6B lb. 1.55 - —
18965 Fast yellow 2G lb. 2.32 - —
19140 Yellow XX lb. 2.48 - —
19555 Yellow NN, conc. lb. 3.67 - —
20170 Brown Y lb. 1.53 - —
20470 Blue black, extra, conc lb. 1.44 - —
21010 Brown, RX, conc lb. 1.42 - —
22240 Scarlet B lb. 2.81 - —
22310 Red FC lb. 1.57 - —
22311 Brown MCW lb. 1.47 - —
22610 Blue 2B, extra conc. lb. 1.53 - —
23500 Red 4BX, conc. lb. 1.80 - —
24410 Sky blue FF, extra, conc. lb. 1.95 - —
24895 Brilliant yellow, conc. lb. 3.27 - —
26360 Navy blue 3R, conc. lb. 1.84 - —
26695 Black F, conc. lb. 2.30 - —
26900 Milling Red 3R, conc lb. 2.24 - —
27075 Neutral black 2B, conc lb. 2.75 - —
27720 Gray L lb. 2.18 - —
29185 Fast scarlet 4BNC lb. 2.23 - —
30015 Diazo black VJ conc lb. 2.48 - —
30045 Yellow brown K, extra lb. 1.32 - —
30235 Black EB, 200% lb. 1.33 - —
30295 Green BY conc. lb. 1.07 - —
35660 Brown B lb. 2.89 - —
37565 Naphthol SWF lb. 1.85 - —
40000 Yellow 2G lb. 1.44 - —
41000 Yellow OX lb. 2.45 - —
42000 Green V, crystals lb. 2.73 - —
42040 Brilliant green G crystals lb. 3.62 - —
42090 Blue EG lb. 1.85 - —
42100 Milling green 6B, conc. lb. 4.78 - —
42640 Violet 4BXN lb. 2.43 - —
42830 Brilliant blue, BBG lb. 2.44 - —
44045 Blue B, extra conc. lb. 3.61 - —
45170 Red BX lb. 4.76 - —
50415 Nigrosine SSJ lb. 1.03 - —
52015 Blue GXX lb. 2.33 - —
58005 Alizarin red SC lb. 3.64 - —
59700 Golden orange GFD, single paste lb. 2.70 - —
59710 Flaming orange 6RD double powder lb. 4.90 - —
59800 Dark blue BO, single paste. lb. 2.28 - —
59825 Jade green NC supra, double paste lb. 1.50 - —
61570 Alizarin green CG extra lb. 3.81 - —
63010 Alizarin blue SAPG lb. 3.90 - —
63415 Alizarin blue black B lb. 3.26 - —
69825 Blue BLFD double paste lb. 2.76 - —
70300 Brown BR single paste lb 2.03 - —
Dyes, coaltar, oil-soluble, 100-lb. drums, dlvd. No.
12140 Oil scarlet 8L lb 1.87 - —
12055 Oil orange 7078 V lb 1.38 - —
26120 Oil red N 1700 lb 1.94 - —
42535B Methyl violet base lb. 1.88 - —
44045B Victoria blue base lb. 4.09 - —
50415B Oil black 860 lb. .80 - —
61565 Alizarin cyanine green base, lb. 6.13 - —
Spirit black RB lb 3.89 - —
Spirit brown GN lb 5.30 - —
Spirit orange R conc. lb 5.87 - —
Spirit red B conc lb 6.41 - —
Pr 517 Spirit yellow 2R conc lb 4.62 - —
Pr 554 Spirit blue THN lb. 9.06 - —

E

Echinacea root, bls. lb 1.25 - —
Elm bark, grinding, bls. lb .30 - .33
Powd., bbls., bxs lb. .60 - —
Select, bundles lb. .75 - —
Emetine hydrochloride, USP, bots. oz. 48.40 - —
Endrin, tech., dms., 100-lbs. or more, 100% basis, dlvd. lb. 2.77 - —
Eosin red toner, bbls. works lb. 1.95 - —
Ephedrine syn., USP, anhyd., bots. 100-oz. lots oz. .98 - 1.00
hydrous, bots., 100-oz. lots, oz. .92 - —
Ephedrine hydrochloride NF, dms., 100-oz., f.o.b. works oz. .75 - —
Ephedrine sulfate, USP, cryst., dms., 100-oz. f.o.b works oz. .73 - —
USP, powd., dms., 100-oz., same basis oz. .73 - —
Epichlorohydrin, dms., c.l., dlvd lb. .29½- —
dms., t.c.l., dlvd. lb. .31 - —
tanks, dlvd. lb. .27 - —
Epinephrine base, syn, USP, bots. 100 gram lots gram .58 - —
Epsom salt (see Magnesium sulfate)
Erigeron oil, cns lb 11.00 - —
Ergot, NF, dms., tin-lined lb. 2.00 - —
Eserine salicylate, bots oz. 44.00 - —
Eserine sulfate, bots. oz. 86.00 - —
Ester gum, gum-rosin type, dms., c.l. dlvd., Ill., Md. Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va lb. .18½- —
Wood-rosin type, dms, c.l., same basis lb 18½ —
Ether (see specific product).
Ethyl acetate nat., ferment, 85-88%, dms., c.l. dlvd lb .15 - —
dms., t.c.l., dlvd lb 16½ - —
tanks dlvd lb 12½ - —
95-98% dms. c.l., dlvd. lb 15¼- —
dms., t.c.l., dlvd lb 16¾ —
tanks, dlvd lb 12¾- —
Ethyl acetate nat., ferment, 99%, dms. c.l. dlvd lb 15½- —
dms., t.c.l., dlvd lb .17 - —
tanks, dlvd. lb. .13 - —
syn., 85-88% dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd lb. 16½- —
tanks, dlvd lb. 12½- —
Ethyl acetate syn. 95-98%, dms., c.l. dlvd lb. .15¼- —
dms., t.c.l., dlvd lb 16¾ —
tanks, dlvd lb .12¾- —
99%, dms. c.l., dlvd. lb. .15½- —
dms., t.c.l., dlvd. lb .17 —
tanks dlvd lb .13 —
Ethyl acetoacetate, dms., c.l., dlvd. lb. 58½- —
dms. t.c.l., dlvd. lb .60 - —
tanks, dlvd lb .56 —
Ethyl acrylate, dms., c.l., t.l., dlvd. lb. .34¼- —
dms., t.t.l., dlvd. lb. .35¼- —
tanks, dlvd. lbm. 32¼- —
Ethyl alcohol, 190 pf., USP, tax paid dms. c.l., dlvd E of Rockies gal 20.63 —
dms., t.c.l., same basis gal. 20.73 - 20.84
Ethyl alcohol, 190 pf., USP, tax-free, dms c.l. dlvd E of Rockies gal 68 —
dms., t.c.l., same basis gal 78 .80
tanks, same basis gal 52 —
Ethyl alcohol, absolute 200 pf., tax paid dms. dlvd E of Rockies gal 21.75 —
dms. t.c.l., same basis gal 21.85 - 21.96
tanks same basis gal 21.59 —
Ethyl alcohol, denatured (see Denatured alcohol, ethyl)
Ethyl aminobenzoate USP (see Benzocaine).
Ethyl amyl ketone dms. c.l., dlvd. lb .20 —
dms. t.c.l. same basis lb 21½ —
tanks same basis lb 17½ —
Ethyl benzoate bots. lb 75 1.00
Ethyl bromide tech., 98%, dms., c.l., frt. alld. E lb 43 —
dms. t.c.l. frt alld E lb. 45 —
tanks, frt. alld. E lb. .40 - —
Ethyl butyl ketone dms. c.l., t.l., works lb. .35 —
dms t.c.l., t.l. works lb 36¾- —
tanks works lb .34 —
Ethyl butyrate dms. works lb. .85 1.00
Ethyl carbamate (see Urethane)
Ethyl cellulose, vis. 5 cps., bgs., 5,000 lb lots or more, frt. alld E lb. 73 - —
bgs. smaller lots frt alld E lb. 75 - —
Ethyl cellulose, vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E lb. .68 - —
bgs., smaller lots, frt. alld E. lb. .70 —


2,5-dimethoxyaniline
Readily diazotized. Has potential both as diazonium salt and coupling constituent of azo dyes.
1
phenylethylethanolamine
Undergoes typical reactions of tertiary amines and primary alcohols. Under suitable conditions the ring undergoes typical aniline substitutions.
2
Eastman aromatic intermediates
phenyldiethanolamine
Undergoes the same types of reactions as phenylethylethanolamine.
3
m-tolyldiethanolamine
Undergoes the same types of reactions as phenylethylethanolamine.
4
2,5-di-tert-butylhydroquinone
Insoluble in aqueous caustic as a result of steric hindrance caused by the bulky tert-butyl groups. A polymerization inhibitor for vinyl monomers.
5
tert-butylhydroquinone
The bulky tert-butyl group sterically hinders reaction of the adjacent hydroxy group.
6
tecquinol® (tech. hydroquinone)
With amines yields antioxidants for rubber and plastics. With phthalic and other anhydrides condenses to form dye intermediates, e.g. quinizarin.
7
toluhydroquinone
A promising raw material for organic syntheses. Undergoes the same type of reactions as hydroquinone.
8
hydroquinone monomethyl ether
Benzene nucleus, activated by hydroxy and methoxy groups, is readily nitrated, sulfonated, or alkylated.
9
p-benzoquinone
Reacts with one or two moles of dienes. May often be used as an oxidizing agent when inorganic reagents are unsuitable. Reacts with diazonium salts to form phenylquinones.
10
toluquinone
Undergoes same types of reactions as p-benzoquinone.
11
acetanilide
Used for preparation of sulfa drugs and dye intermediates and as an intermediate for various aniline derivatives.
12
β-oxynaphthoic acid
Quality suitable for use in developing acetate blacks. Also serves as a raw material for manufacture of various naphthol couplers.
13

Eastman CHEMICAL PRODUCTS, INC.
subsidiary of Eastman Kodak Company, KINGSPORT, TENNESSEE

Gentlemen:
Please send me more information on the products I have checked.

1 2 3 4 5 6 7 8 9 10 11 12 13

NAME_____
TITLE_____
COMPANY_____
ADDRESS_____ CITY_____ STATE_____

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Chicago; Cincinnati; Cleveland; Detroit; Framingham, Mass.; Greensboro, N. C.; Houston; New York; Philadelphia; St. Louis. **West Coast: Wilson Meyer Co.,** San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Ethyl chloride tech., cyls., works lb .20 .22
dms. works lb .18 .20
tanks works lb .10
Ethyl cinnamate, cns lb. 3.15 - 3.35
Ethyl ethanolamines mixed, dms. c.l., dlvd E lb .43½ —
dms. c.l. dlvd E lb .44½ —
tanks dlvd E lb .41½ —
Ethyl ether absolute ACS dms lb .27 —
Anesthesia USP dealers 1-lb cns lb 1.01 —
½ lb cns lb 1.09 —
¼ lb cns lb 1.21 —
Indust dms. c.l. dlvd lb .13½ —
dms. l.c.l. dlvd E lb .15 —
tanks dlvd E lb .11 —
2-Ethyl hexoic acid dms., c.l., t.l., dlvd E lb .37 —
dms. l.c.l., t.l. dlvd E lb .38½ —
tanks dlvd E lb .34½ —
2-Ethyl hexoic acid 1c higher W. of Rockies.
2-Ethyl hexyl acrylate, dms. c.l. t.l., straight or mixed frt. alld lb .42½ —
dms. t.l. same basis lb .43½ —
tanks same basis lb .40 —
Prices of 2-ethylhexyl acrylate are 1½c. per lb higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
2-Ethylhexyl alcohol dms. c.l. dlvd lb .23¾ —
dms. c.l. dlvd lb .25¼ —
tanks dlvd lb .21¼ —
Ethyl iodide cbys. works lb 1.30 —
Ethyl methacrylate dms. c.l., frt equald lb .52 —
dms. c.l.l. frt equald lb .52½ —
tanks frt equald lb .50 —
Ethyl morphine hydrochloride USP hcts oz. 11.85 —
Ethyl oenanthate dms lb 1.05 1.30
Ethyl oxalate (see Diethyl oxalate)
Ethyl silicate dist. (see Tetraethyl orthosilicate)
Ethyl silicate 40% available SiO2 dms. c.l. dlvd lb .44½ —
dms. l.c.l. dlvd lb .46 —
tanks dlvd lb .42 —
N-Ethyl-a-naphthylamine dms. works lb 1.04 - —
N-Ethyl-m-toluidine tech. nq. tanks frt alld lb .83 - —
N-Ethyl-o-toluidine bbls lb .88 - —
Ethylamine (see Mono-, Di- or Tri-)
N-Ethylaniline dms. c.l. frt alld lb .57 —
dms. c.l.l. frt alld lb .58 —
tanks frt alld lb .55 —
Ethylbenzene 99% dms. c.l., l.c.l. frt equald lb. .14 - —
dms. l.c.l., same basis lb. .16 - —
tanks, same basis lb. .11½- —
2-Ethylbutyl alcohol, dms. c.l., works lb .30 —
dms. l.c.l. works lb .30¾ —
tanks works lb .28 —
Ethylene, contract refy gate lb .0475- .052
Ethylene dibromide dms. c.l. frt equald lb .30½ —
dms. l.c.l. frt equald lb .31½ —
tanks frt equald lb .28½ —
Ethylene dichloride dms c.l. dlvd lb .11½- —
dms., l.c.l., same basis lb .13 —
tanks same basis lb .09 —
Ethylene dichloride prices W. of Rockies, 1c per lb higher
Ethylene glycol indust dms., c.l., dlvd E lb .16 —
dms., l.c.l. same basis lb .17½ —
tanks same basis lb .13½ —
Ethylene glycol monobutyl ether, dms c.l. dlvd E lb .22 —
dms. l.c.l. dlvd E lb .23½ —
tanks dlvd E lb .19½ —
Ethylene glycol monoethyl ether, dms. c.l. dlvd E lb .21 —
dms., l.c.l., dlvd E lb .22½ —
tanks, dlvd E lb .18½ —
Ethylene glycol monoethyl ether acetate dms. c.l. dlvd E lb .19½- —
dms., l.c.l., dlvd E lb .20½ —
tanks, dlvd E lb .17 —
Ethylene glycol monomethyl ether, dms c.l. dlvd E lb .21 —
dms., l.c.l., dlvd E lb .22½ —
tanks, dlvd E lb .18¼ —
Ethylene glycol monomethyl ether acetate dms. c.l. dlvd, E lb .29 —
dms. l.c.l. dlvd E lb .29¼ —
tanks dlvd E lb .27 —
Ethylene glycol monostearate, flake, 150-lb. ctn lb. .33 - —
Ethylene oxide dms c.l. dlvd E, lb .21½ —
dms., l.c.l. dlvd E lb .24½ —
tanks dlvd E lb .15½- —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine 85-88% dms., c.l., dlvd E., 100% basis lb .42 —
dms l.c.l. dlvd E 100% basis lb .43 - —
tanks dlvd E, 100% basis lb .40 - —
Ethyl vanillin, 100-lb. fib. dms. 500-lb lb 5.65 - —
less than 500-lb. lb. 6.10 - —
Eucalyptol USP cns. dms lb .85 1.40
Eucalyptus oil NF rectified 70-75% dms lb. .45 —
NF rectified 80-85% dms lb .53 .62
Eugenol tech dms lb 1.45 —
USP dms lb 2.00 —
Euphorbia herb, bls lb .12 .15

F

F salt paste tech dms works lb 2.30 —
Fennel oil, sweet, USP, cns. lb. 2.60 - —
Fennel seed Argentine, bgs lb .16 —
French light bgs lb .16 —
Indian, light, bgs lb. .17½- —
Rumanian bgs lb .14 —
Yugoslav light bgs lb .16½- —
Fenugreek seed, Moroccan, bgs lb .08 —
Ferric chloride anhyd. tech dms., c.l. works 100 lbs 7.50 — —
dms. l.c.l. works 100 lbs 8.50 — —
Ferric chloride indust., cryst., bbls., c.l., works 100 lbs. 5.25 6.75
bbls. l.c.l. works 100 lbs 5.75 7.25
42° Be. photo grade, cbys., c.l., works 100 lbs 7.25 8.25
sewage grade, tanks, frt equald. 100% basis 100 lbs 4.00 —
USP cryst. dms c.l works lb 68½- —
Ferric citrate gran dms lb .86 —
Ferric hypophosphite, NF, 175-lb. dm lb. 4.25 - —
Ferric naphthenate liq., 6% Fe, dms. frt alld lb. 28¼- —
Ferric oxalate, tech., gran., 50-lb. dm. f.o.b. works E lb .89 —
Ferric oxides (see Iron oxides)
Ferric phosphate NF, soluble, gran. pearls, cs lb. .72 .75
Ferric pyrophosphate 25% Fe, soluble, gran. pearls, 225-lb. dm lb. .79 - —
Ferric resinate, dms., ton lots, frt. alld lb. .45 - —
tots frt alld lb. 40¼- —
Ferric stearate dms., c.l., frt. alld, lb. .39 - —
dms., l.c.l., frt alld lb. .40 .44

Ferric sulfate, partly hydrated, bgs., c.l., works ton 35.25 - —
bgs., l.c.l., works ton 36.25 - 42.25
bulk, c.l., works ton 33.25 —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .65 - .68
Green pearls, USP XII, gran., dms lb. .66 - .69
Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29½
Ferric-potassium oxalate, fine gran., dms lb. .32½ .34½
Ferric-sodium oxalate, fine gran., dms lb. .27½- .29½
Ferrous gluconate, USP, 200-lb. dm., frt. equald lb. .96 - —
Ferrous sulfate, gran., bgs., c.l., works ton 34.50 - —
bgs., l.c.l., dlvd, Metropolitan area 100 lbs 3.35 4.25
bbls., c.l., works ton 40.00 —
bulk, c.l., works ton 27.00 —
USP cryst., bbls., dms lb .09½- .10
Fir balsam, Canada, bbls. gal. 32.00 35.00
Oregon, bbls gal 3.40 4.64
Fir oil, Canada cns lb 1.75 2.50
Fish oil, refd., alkali, dms. lb. .1300- .1350
Kettle-bodied, dms. lb. .1530- .1580
Light-pressed, dms. lb. .1150- .1200
tanks lb. .10 - —
Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms 1,000,000 units. .12 - —
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts ton 92.00 - —
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic and Gulf coasts ton 88.00 - —
Fleaseed (see Psyllium seed)
Folic acid, USP, oots., fib dms., kilo lots or more gram .30 .44
10% feed grade, fib dms., 3 kilos or more kilo 30.00 - 44.00
Formaldehyde, 37% inhibited, 12 to 15% methanol, USP, dms., c.l., dlvd lb. .0895- —
tanks, dlvd lb. .0430- —
Formaldehyde, methanol-free (uninhibited), tanks, dlvd lb. .0375- —
Formic acid, 85% cbys. c.l., works lb. .1570- —
cbys., l.c.l., works lb. .1620- .1720
90% cbys., c.l., works lb. .1625- —
cbys., l.c.l., works lb. .1675- .1775
Fringetree bark bls lb .65 .70
Fumaric acid, tech., 250-lb. dms., c.l., frt equald lb. .23¼- —
dms., l.c.l., frt equald lb. .24¾- —
Fumaric acid in bags ½c. per lb ess
Furfural, dms c.l. works lb .13 —
dms. c.l. works lb .14 —
tanks, dlvd E lb. .11½- —
tanks, dlvd W lb. .12½- —
Furfuryl alcohol, cns., works lb .28 —
dms. c.l. t.l., Newark, N. J lb .20½- —
dms. l.c.l. t.l., Newark, N. J lb .21½- —
dms. c.l., t.l., Memphis, Tenn lb .19 - —
dms., l.c.l. t.l., Memphis, Tenn lb .20 - —
tanks, Memphis, Tenn lb .175 - —
Fusel oil, refd. dms. c.l., dlvd lb .18 - —
dms., l.c.l. dlvd, lb. .19½- —
tanks, dlvd lb. .15½- —

G

G salt, bbls, frt alld., 100% basis lb .73 —
Gallic acid NF VII, bbls, 1,000-lb lots lb 2.00 —
bbls, smaller lots lb 2.02 2.22
Tech., bbls, 1,000-lb. lots lb 1.78 —
bbls, smaller lots lb 1.80 2.00
Gamma acid dry grd., bbls., frt. alld lb 1.75 —
Gammapicoline (see g-picoline).
Garlic oil, dom., bots. oz 4.75 6.05
Imp., bots oz. 4.50 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible 75 AOAC test, bbls., c.l., dlvd lb. .55 - —
150 AOAC test, bbls., c.l., dlvd, lb. .64 - —
200 AOAC test, bbls., c.l., dlvd, lb. .70 - —
225 AOAC test, bbls., c.l., dlvd, lb. .74 - —
275 AOAC test, bbls., c.l., dlvd, lb .82 - —
Geisenium root, bls. lb .30 .35
Gentian root, bls lb .24 —
Grd., bbls, bxs lb .30 —
Powd., bbls, bxs lb .30 —
Geraniol, extra cns, dms. lb 1.75 2.40
Soap grade, dms lb .90 1.75
Standard, cns, dms. lb 1.65 —
Synthetic, dms lb 1.30 —
Geranium oil, Algerian, cns lb. 22.00 - 23.00
Bourbon, cns. lb. 22.00 - 28.00
Geranium oil, Turkish (see Palmarosa oil)
Geranyl acetate, cns lb 1.80 2.70
Synthetic, dms lb 1.45 —
Ginger oil, dist., bots lb 11.50 14.00
Ginger oleoresin, NF, from African root, bots lb 4.25 5.00
NF, from Jamaican root, bots lb 4.75 —
Ginger root, Cochin, bgs. lb. .28 - —
Nigerian, split, bgs lb. .22 - —
Sierra Leone, bgs lb. .33 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50% dms., c.l., t.l., f.o.b. works lb. .20 - —
dms., l.c.l., f.o.b. works lb. .21 - —
tanks, f.o.b. works lb. .17 - —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd lb. .16 —
131 jellygrams, bgs., c.l., same basis lb. .16½ —
164 jellygrams, bgs., c.l., same basis lb. .18½ —
Glue, bone, extracted, dry bone, 191 jellygrams, bgs., c.l., same basis lb. .19½ —
222 jellygrams, bgs., c.l., same basis lb. .21 - —
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis lb. .16 - —
86 jellygrams, bgs., c.l., same basis lb. .18 - —
115 jellygrams, bgs., c.l., same basis lb. .16½ —
Glue, bone, green, 135 jellygrams, bgs., c.l., same basis lb. .17½ —
164 jellygrams, bgs., c.l., same basis lb. .18½ —
180 jellygrams, bgs., c.l., same basis lb. .19½ —
200 jellygrams, bgs., c.l., same basis lb. .20½ —
Bone glue, l.c.l., prices 2c higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .18 - —
95-149, bgs., c.l., dlvd lb. .19 - —
122-149, bgs., c.l., dlvd lb. .20½ —
150-177, bgs., c.l., dlvd lb. .22½ —
178-206, bgs., c.l., dlvd lb. .25 - —
Glue, hide, 207-238, bgs., c.l., dlvd lb. .28 - —
237-266, bgs., c.l., dlvd lb. .30½ —
267-298, bgs., c.l., dlvd lb. .32½ —
299-330, bgs., c.l., dlvd lb. .34½ —
331-362, bgs., c.l., dlvd lb. .36½ —
363-394, bgs., c.l., dlvd lb. .38 - —
Glue, hide, 395-427, bgs., c.l., dlvd. lb. .40 - —
428-460, bgs., c.l., dlvd lb. .42 - —
461-494, bgs., c.l., dlvd lb. .44 - —
495-529, bgs., c.l., dlvd lb. .46 - —
Hide glue, l.c.l. prices 2c. higher.
l-Glutamic acid, 99½%, fib. dms., 100-lb lots, frt alld lb. 1.80 - —
fib. dms. 25-lb. lots, frt. alld lb 1.88 - —
l-Glutamine, bots., 1-9 kilo lots, kilo. 150.00 - 300.00
Bots., 50-kilo lots kilo. 100.00 —
Bots. 500-kilo lots kilo. 75.00 - —
Glycerine, dom., nat., crude, saponification 88%, tanks, dlvd, lb. .1870- —
nat., crude, soaplye, 80%, tanks, dlvd lb. .17 - .17¼
nat., refd., USP, CP, 99%, dms., c.l., dlvd lb. .30⅞- —
dms., l.c.l., dlvd. lb. .31⅝- —
tanks dlvd lb. .29⅛- —
Glycerine, dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd lb. .30 —
dms., l.c.l., dlvd. lb. .30¾ —
tanks dlvd lb. .28¼- —
nat., high gravity, dms., c.l., dlvd lb. .30¾ —
dms., l.c.l., dlvd. lb. .31½ —
tanks, dlvd lb. .29 - —
Glycerine, dom., syn., dms., c.l., dlvd lb. .31 —
dms., l.c.l., dlvd. lb. .31¾ —
tanks, dlvd lb. .29¼ —
Imp., nat., crude, soaplye, 80%, c.i.f lb. .17½ —
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).
Glycolic acid (see Hydroxyacetic acid).
Glycolonitrile, 70%, aqueous, dms., c.l., t.l., works lb. .40 - —
dms., l.c.l., same basis lb. .42 - —
tanks, same basis lb. .39 - —
Glyoxal, 30%, dms., c.l., works lb. .20½- —
dms., l.c.l., works lb. .21¼- —
tanks, works lb. .18 - —
Golden seal root, NF, tested, bls. lb. 3.10 - —
Gramicidin, 1 to 5 kilos, f.o.b. works, gram. 4.25 - —
Grapefruit oil, dms lb. 3.00 - —
Graphite, amorp., powd., bgs., fib. dms., ex whse lb. .06 - .09½
Cryst., 88-90% powd., bgs., fib. dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib dms., ex whse lb. .21 - .24½
95-97% powd., bgs., fib. dms., ex whse lb. .29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 .31
No. 2, 90-95% bgs., fib. dms., ex whse lb. .29 .31
Grease, white choice all hog, tanks, dlvd lb., .08¾- .09
Yellow, tanks, dlvd lb. .05 - .05½
Grease oil, No. 1 dms., c.l. lb. .13¾ -
dms., l.c.l. lb. .14¾- .15¾
Extra winter, strained, dms., c.l., lb. .16¼ —
dms. l.c.l. lb. .17¼ .18¼
Prime, burning, dms., c.l. lb. .17¾ —
dms. l.c.l lb. .18¾ .19¾

GREEN PIGMENTS
Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green

Grindelia robusta herb, bls lb. .40 —
Guaiacol NF, cryst., dms., tins lb 2.10 2.15
NF, liq., cbys, dms lb 2.30 2.40
Guaiacwood oil, cns lb. .65 .80
Guaiacol carbonate NF VII, dms lb 3.40 3.45
Guar gum, food grade, bgs., c.l lb. .38 —
ogs., 5,000-lbs or more lb .39 —
Indust., bgs., c.l lb .32 —
Tech grade, bgs. lb .30 .33

GUMS
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum

H

H acid, dry, bbls, c.l., frt. alld., 100% basis lb. 1.00 - —
bbls., l.c.l., same basis lb. 1.05 - —
Hansa yellow 10 to bbls, dlvd E, of Rockies lb 2.45 —
Hansa G yellow, pigment, bbls. lb. 2.20 - —
Hawthorn berries, bgs lb .18 .20
Heliotropin, 100-lb. tots, dms. lb 2.60 3.40
Hellebore root, dom., green, bls lb .70 .75
Helonias root, bls lb. 1.50 —
Hemlock oil, cns lb. 2.55 3.00
Henbane, leaves, bls lb. .40 - .45
Heptachlor, dms. c.l., t.l., frt. alld., 100% basis lb. .96 - —
Heptane, indust., tankcars, New Jersey and New York gal. .20 - —
Houston, Texas gal. .1625- —
Hesperidin, purif., 100-lb. fib. dms., f.o.b., works lb. 8.95 - —
Hesperidin methylchalcone, oots., 50-lb. lots, works lb. 22.50 - —
bots., 5-lb. lots, works lb. 23.00 - —
bots., 1-lb. lots works lb. 23.50 - —
Hexachlorophene, dms., 1,100 lbs. or more lb. 1.84 - —
dms. to 1,100 lbs lb. 1.94 - —
Hexalin (see Cyclohexanol)
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York City lb. .233 - —
Hexamethylenetetramine, tech., bgs., 1,000-19,999-lb. lots, same basis lb. .243 - —
bgs., smaller lots, same basis lb. .253 - —
fib dms., 1,000-lb. lots or more, same basis lb. .250 - —
fib dms., smaller lots, same basis lb. .253 - —
Hexamethylenetetramine, USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia lb. .42½- —
bgs., smaller lots, same basis lb. .43½- .48½
Hexane, industrial, tankcars, New Jersey and New York gal. .20 - —
Houston, Texas gal. .16 - —
l-Hexanol, dms., c.l., works lb. .35 - —
dms., l.c.l., works lb. .35¾- —
tanks works lb .33 - —
Hexyl cinnamic aldehyde, dms. lb. 3.95 - 4.00
n-Hexyl methacrylate, dms., c.l., works lb. .75½- —
dms. l.c.l. works lb. 76 —
Hexyl salicylate, dms. lb. 1.70 - 1.75
Hexylene glycol, dms., c.l., dlvd lb. .17½- —
dms., l.c.l., dlvd. lb. .19 - —
tanks, dlvd lb. .15 - —
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd lb. 14.00 - —
dms. smaller lots, dlvd lb. 14.50 - —
Homatropine hydrobromide, USP, bots oz. 3.25 - —
Homatropine methylbromide, USP, bots oz. 3.25 - —
Hoofmeal, 17-18% ammonia bulk, c.l., Chicago, unit-ton. 6.75 - —
Horehound herb, bls. lb. .18 - .20
Hydrastis (see Goldenseal).
Hydrazine hydrate, 85% ret. dms., works lb. 1.35 1.88
100%, ret. dms., works lb. 1.60 1.90
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works lb. 2.93 —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd, zone 1 lb. .29¼- —
dms., l.c.l., dlvd, zone 1 lb. .29¾- .30¼
tanks, dlvd zone 1 lb .27¼- —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.
Hydrobromic acid, medicinal, 48%, cbys. frt equald lb. .48 .56
Hydrochloric acid, anhyd (see Hydrogen chloride)
Hydrochloric acid, 18° cbys., c.l., works 100 lbs 2.50 —
cbys., l.c.l., dlvd Metropolitan area 100 lbs 2.90 3.05
tanks, works, frt equald ton 28.00 —
20° cbys., c.l., works 100 lbs 2.75 —
cbys., l.c.l. dlvd Metropolitan area 100 lbs 3.15 —
tanks, works, frt equald ton 30.00 —
Hydrochloric acid, 22° cbys., c.l., works 100 lbs 3.25 —
cbys., l.c.l., dlvd Metropolitan area 100 lbs 3.65 —
tanks, works, frt equald ton 35.00 —
Hydrochloric acid, CP, USP, consumers cbys., extra, c.l., works lb. .15¾ —
cbys., l.c.l., same basis lb .17¼ .17¾
Hydrochloric acid, 5-pint oots., extra cs., c.l., same basis lb 20¾ —
Hydrocortisone acetate, bulk, oots., kilo lots or more, gram 1.05 1.90
Hydrocortisone alcohol, bulk, bots., kilo lots or more, gram 1.10 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pt. bots., f.o.b. works, pt. .70 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 40%, 55-gal. or 30-gal. dms., c.l., t.l., dlvd 100 lbs 19.25 - —
55-gal. dms., l.c.l., t.l.l., dlvd 100 lbs 20.75 - —
20-gal. dms., c.l., t.l., dlvd 100 lbs 21.00 —
Hydrofluoric acid, aqueous, 70%, 20-gal., dms., c.l., t.l., dlvd 100 lbs 22.50 - —
tanks, works frt equald 100 lbs 14.40 —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery.
Hydrofluosilicic acid, dms., works, 30% basis lb. .07 - —
Hydroflumethide, dms., fib cans., works lb .30 .40
50-lb. cyls., c.l., works lb .55 .60
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works lb .45 —
Hydrogen cyanide, liq., 98%, tanks, works lb .14 —
Hydrogen fluoride, anhyd., cyls., dlvd E lb 30½- .32¼
cyls., dlvd W lb .39 —
tanks, works lb .18 —
Hydrogen peroxide, 35%, dms., c.l., dlvd lb .202 —
dms., l.c.l., dlvd. lb .211 —
tanks, dlvd lb .1800- —
Hydroquinone, photo grade, dms., 50-lbs. f.o.b. works lb 1.10 —
Tech., dms., c.l., dlvd lb .82½ —
dms., l.c.l., dlvd lb .84½ —
Hydroquinone monomethyl ether, dms., c.l., dlvd lb 2.59 —
dms., l.c.l., dlvd lb 2.61 - —
Hydroxyacetic acid, tech., 70%, dms., Philadelphia and Chicago lb .11 —
tanks, Belle, W. Va lb .073 —
Hydroxycitronellol, cns lb 4.85 5.75
Hydroxyethyl cellulose, add grades, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point lb. .84 - —
fib. dms., 2,000 to 19,999-lb. lots, same basis lb. .89 - —
fib. dms., 100 to 1,999-lb. lots, same basis lb. .93 - —
fib. dms., smaller lots same basis lb 1.03 —
Hyoscine salts (see Scopolamine).
Hyoscyamine hydrobromide, bots. oz. 7.75 - 8.50
Hyoscyamine sulfate, bots oz. 7.75 - 8.50
Hypophosphorous acid, purif., 50% 10-cbys. f.o.b. works lb 1.95 —
NF 50% 10-chys. same basis lb 1.35 —

I

Ichthammol, NF, dms lb .75 1.00
Indigo (see Dyes, coaltar, 1171 indigo, syn.)
Indole, CP, bots. lb. 13.75 - 15.00
Inositol, 50-100 lb. dms., 1,000 lbs. or more, dlvd lb 4.50 —
Inositol, 50-lb. dms., less than 1,000 lb., dlvd lb 4.75 - —
10 lb. cns., 10-50 lbs. dlvd lb 5.00 - —
5 lb. bots., dlvd lb 5.25 - —
Insect flowers (see Pyrethrum)
Iodine, crude, kgs. lb. 1.10 - —
Resub., USP, dms., f.o.b. works lb. 2.20 - 2.22
Iodochlorohydroquinolin, USP, dms. lb 3.80 - —
Iodoform, NF, dms. 300-lbs. f.o.b. works lb 4.90 - —
dms., 100-lbs., same basis lb 5.05 - —
a-Ionone, cns lb 4.60 5.75
b-Ionone, cns lb 4.15 6.15
Ipecac root, whole, bgs. lb 8.00 8.50
Powd., bbls, bxs lb 9.50 - 10.00
Irish moss, bleached, prime, bls lb. .25 .27
Iron blue, alkali-resisting, nbls., c.l., dlvd E lb. .57 - —
bbls., l.c.l., ton lots same basis lb. .58 - —
bbls., smaller lots, same basis lb. .59 - —
Dom., reg., bbls, c.l. dlvd E lb. .52 - —
Iron blue, alkali-resisting, dom., reg., bbls, l.c.l., ton lots, same basis lb. .53 - —
bbls, l.c.l., smaller lots same basis lb .54 - —
Imp., British, reg., bbls, c.l., dlvd, E lb. .48 - —
bbls., l.c.l., ton lots, same basis lb. .49 - —
bbls., l.c.l., smaller lots, same basis lb .50 —
Iron blue, dlvd. prices 1c higher for Pacific Coast states: Wash., Ore., Cal., N. M., Ariz., Mont., Wyo., Utah, Col. and Nev.
Iron compounds (see Ferric or Ferrous)
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs., l.c.l., works lb. .15 —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼ —
bgs., l.c.l., works lb .14½ —
Iron oxide, metallic, brown, bgs., works lb. .05½- —
Iron oxide, Persian Gulf, red, bgs., c.l., works lb .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, E. St. Louis, New York City lb. .34¼- —

Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works	lb.	.06¼-	—
bgs., l.c.l., works	lb.	.06½-	—
Iron oxide, Spanish red, bbls., c.l., ex dock	lb.	.05¾	Nom.
bbls., l.c.l., ex dock	lb.	.06	Nom.
bbls., l.c.l., ex whse, New York	lb.	.06½	Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works	lb.	.06¾-	.07
Peruvian type, bgs., l.c.l.	lb.	.023	.024
Iron oxide, yellow, pure, light lemon shade bgs. c.l., works	lb.	.12¼-	—
other shades, same basis	lb.	.12 -	.12½
Isoamyl alcohol, dms., c.l., works, frt. alld E	lb.	.27½-	—
dms., l.c.l., same basis	lb.	.29 -	—
tanks, same basis	lb.	.25 -	—
Isoborneol cns.	lb.	1.44 -	1.80
Isobornyl acetate cns.	lb.	46	56
Isobornyl formate, dms.	lb.	1.15 -	1.20
Isobornyl propionate, dms.	lb.	1.20 -	1.25
Isobutyl acetate perfume grade cns.	lb.	.30 -	.35
Isobutyl acetate, solvent grade dms., c.l., dlvd E of Rockies	lb.	.15¼-	—
dms., l.c.l., same basis	lb.	.16¾-	—
tanks same basis	lb.	.12¾-	—
Isobutyl alcohol dms., c.l., dlvd	lb.	.15½-	—
dms., l.c.l., dlvd.	lb.	.17 -	—
tanks, dlvd	lb.	.13 -	—
Isobutylene, 99% tanks, works	gal.	.38 -	—
Isobutyl isobutyrate, dms., f.o.b. works	lb.	.75 -	—
Isobutyraldehyde, CP, dms., c.l., dlvd	lb.	.27½-	—
dms., l.c.l., dlvd.	lb.	.28½-	—
Tech., dms., c.l., dlvd.	lb.	.22 -	—
dms., l.c.l., dlvd.	lb.	.23 -	—
tanks, dlvd	lb.	.19½-	—
Isobutyric acid, dms. c.l., t.l., dlvd.	lb.	.35	—
dms., l.c.l., t.l., same basis	lb.	.36½-	—
t.c. t.l. same basis	lb	33	—
Isobutyronitrile, dms., c.l., dlvd.	lb.	.47½-	—
dms., l.c.l., dlvd.	lb.	.48½-	—
tanks, dlvd.	lb.	.45 -	—
Isoeugenol cns.	lb.	3.40	4.25
Isoniazid, powd., bulk, 50 kilos	kilo.	12.00 -	—
Isonicotinic acid, 100-lb fib. dms., works	lb.	4.25 -	—
Isonicotinic acid hydrazide (see Isoniazid).			
Iso-octyl alcohol, dms., c.l., dlvd. E.	lb.	.23½-	—
dms., l.c.l., dlvd. E.	lb.	.25 -	—
tanks, dlvd E	lb.	.21 -	—
Isopentane com'l, grade, tanks, f.o.b. Tex. refy	gal.	.16½-	—
Isophorone, dms., c.l., dlvd.	lb.	.24½-	—
dms., l.c.l., dlvd.	lb.	.25¼-	—
tanks, dlvd.	lb.	.22½-	—
Isophthalic acid, dms., c.l., works, frt equald	lb.	.18	—
dms. l.c.l., same basis	lb.	.19 -	—
Isopropanol (see Isopropyl alcohol).			
Isopropyl acetate, dms., c.l., dlvd.	lb.	.14 -	—
dms., l.c.l., same basis	lb.	.15½-	—
tanks, same basis	lb.	.11½-	—
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd	gal.	.58 -	—
dms., l.c.l., dlvd.	gal.	.68 -	—
tanks, dlvd.	gal.	.42 -	—
Isopropyl alcohol, refd., 95%, c.l., dms., dlvd	gal.	.60 -	—
dms., l.c.l., dlvd.	gal.	.70 -	—
tanks, dlvd	gal.	.44 -	—
anhyd. c.l., dlvd.	gal.	.62 -	—
dms., l.c.l., dlvd.	gal.	.72 -	—
tanks, dlvd	gal.	.46 -	—
Isopropyl benzene (see Cumene).			
Isopropyl ether dms., c.l., dlvd.	lb.	.09½-	—
dms. l.c.l. dlvd	lb.	.11 -	—
tanks, dlvd	lb.	.07 -	—
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l. t.l., works	lb.	1.00 -	—
dms., l.c.l., works	lb.	1.05 -	1.25
tanks, works	lb.	.99 -	—
Isopropylamine (see Mono, Di, or Tri-)			
Isopropyl-N-phenyl carbamate, 450-lb fib dms., c.l., t.l., works	lb.	.75 -	—
450-lb. fib dms., l.c.l., works	lb.	.80 -	.90
Isoquinoline, dms., works	lb.	.65	1.25
Itaconic acid, refd. bgs. c.l., f.o.b. works	lb.	.49½-	—
bgs., l.c.l., same basis	lb.	.50¼-	—
Tech., bgs., c.l., same basis	lb.	.34½-	—
bgs., l.c.l., same basis	lb.	.35½-	—

J

J acid, paste bbls., works, 100% basis	lb.	2.70 -	—
Powd., bbls., same basis	lb.	2.75 -	—
Jalap root, NF bls.	lb.	.60 -	—
NF, powd. bbls., bxs.	lb.	.70 -	.75
Japan wax, cs.	lb.	.29	.31
Juniper berries, bgs.	lb.	.16	.17
Juniper berry oil, NF, bots.	lb.	2.90 -	3.75
Twice rectified, bots.	lb.	3.25 -	—
Juniper tar oil, NF, dms.	lb.	.42 -	.60
Juniper wood oil, tech., cns.	lb.	.38 -	.55

K

Kaolin (see also Clay, China).			
Kaolin NF, powd., fib. dms.	lb.	.10 -	.12
NF colloidal 50-lb. bgs.	lb.	.15½-	.17½
Karaya gum, No. 1, NF, powd., bls	lb.	.48	.50
No. 2, powd., bbls.	lb.	.43	.45
No. 3, powd. bbls.	lb.	.37	.40
Koch acid, bbls., frt. alld., 100% basis	lb.	1.00	—
Kola nuts, bgs.	lb.	.11 -	.12

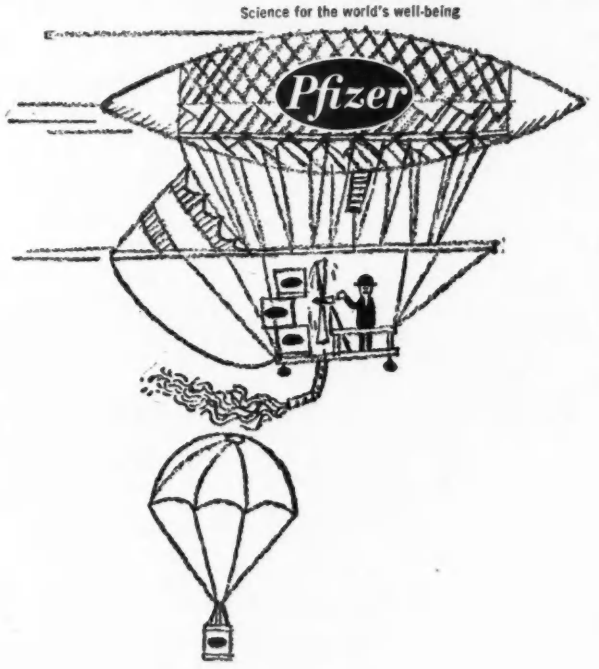
L

L acid, bbls., works	lb.	1.25 -	—
Lacquer diluent, petroleum, 140°F. 200°F. b.r., tankcars, New Jersey and New York	gal.	.20 -	—
Group 3	gal.	.15125-	—
Houston, Texas	gal.	.16 -	—
Lacquer diluent, petroleum, 200°F-240°F b.r., tankcars, New Jersey or New York	gal.	.20 -	—
Group 3	gal.	.14125-	—
Houston, Texas	gal.	.16	—
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald	lb.	.1985-	—
bbls., dms., 20 or more, frt. equald	lb.	.2035-	—
bbls., dms., 5 to 19, frt. equald.	lb.	.2085-	—
bbls., dms., 1 to 4, frt. equald.	lb.	.2135-	—
Lactic acid, edible, 80%, bbls., c.l., dms., frt. equald	lb.	.3335-	—
bbls., dms., 20 or more, frt. equald	lb.	.3385-	—
Lactic acid, edible, 80%, bbls., dms., 5 to 19, frt. equald	lb.	.3435-	—
bbls. dms., 1 to 4, frt. equald.	lb.	.3485-	—
Plastic grade, 50%, c.l., bbls., works	lb.	.2740-	—
bbls., 20 or more, works	lb.	.2790-	—
bbls. 5 to 19, works	lb.	.2840-	—
bbls., 1 to 4, works	lb.	.2890-	—
80% bbls., c.l., works	lb.	.4625-	—
bbls. 5 to 19 works	lb.	.4725-	—
bbls., 1 to 4, works	lb.	.4775-	—
Lactic acid, tech., 44%, bbls., c.l., works	100 lbs.	12.45 -	—
bbls., l.c.l., works	100 lbs.	12.85 -	—
USP, 85%, cbys.	lb.	.95 -	—
Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald	lb.	.14 -	—
bgs., 6,000-lb. lots, frt. equald	lb.	.14½-	—
bgs., 2,000-lb. lots, frt equald	lb.	.14¾-	—
bgs., 200-lb. lots, frt. equald	lb.	.15¼-	—
Edible lactose in fib. dms., ½c. higher.			
Lactose, ferment, grade, bgs., c.l., works	lb.	.08½-	—
Lactose, USP, reg., fib. dms., 30,000-lb. lots, frt. equald	lb.	.21½-	—
fib. dms., 2,000-lb. lots, frt. equald	lb.	.22¼-	—
200-1,830-lb. lots, frt. equald	lb.	.22¾-	—
USP lactose in bags ½c to 1c lower.			
Lactose, USP, spray dried, bgs., t.l., frt. equald	lb.	.18½-	—
bgs., l.t.l., frt. equald	lb.	.19 -	.19¾
Lady's slipper root, bls.	lb.	3.00	3.50
Lamp black, bgs., c.l., works	lb.	.16 -	.45
Lanolin, USP, anhyd., 400-lb. dms., works	lb.	.24 -	.28
USP, annyd., cosmetic, 400-lb. dms., works	lb.	.26 -	.30
USP, hydrous, 400-lb dms., works.	lb.	.20	—
Lard, cash, dms., Chicago	lb.	.1020-	—
Lard oil (see Grease oil).			
Larkspur seed, bgs.	lb.	.53 -	—
Laurel leaf oil, dms. cns.	lb	9.75 -	12.50
Laurent's acid, bbls	lb.	.70	—
Lauric acid, pure, dms.	lb.	.32¼-	.34¾
tanks	lb.	.29¾-	—
Lauryl alcohol, bots	lb.	2.00	2.50
n-Lauryl methacrylate, dms., c.l., t.l., works	lb.	.65½-	—
dms., l.t.l., works	lb.	.66 -	—

Lavandin oil, 22-24%, dms.	lb.	1.08 -	1.10
Abrial, dms.	lb.	1.12 -	—
Lavender flowers, medium, bls.	lb.	.55 -	.60
Ord., bls.	lb.	.20 -	.25
Select., bls.	lb.	.90 -	1.00
Lavender flower oil, USP, French, 35-37% ester, cns.	lb.	1.85 -	4.00
40-42% ester, cns.	lb.	5.00 -	7.75
Spike, Spanish, cns.	lb.	2.20 -	3.00
Lead acetate, NF, cryst., gran., powd., bbls.	lb.	.34½-	—
White, cryst., bbls.	lb.	.25½-	—
gran., bbls.	lb.	.26½-	—
powd., bbls.	lb.	.26½-	—
Lead arsenate, acid powder, dealers, 3-50-lb. bgs. or any quantity, frt. alld. on $150 or more	lb.	.30½-	—
1-lb bgs., same basis	lb.	.47 -	—
Lead, blue, basic sulfate, bbls., c.l., shipt point, frt. alld	lb.	.17 -	—
bbls., l.c.l., same basis	lb.	.18 -	—
Lead carbonate (see Lead, white, basic carbonate).			
Lead chloride, dms.	lb.	.52 -	—
Lead iodide, NF, V jars	lb.	3.82 -	—
Lead linoleate, fused, 26.5% Pb, dms.	lb.	.38 -	—
Lead metal prime, pigs, New York.	lb.	.12 -	—
St. Louis	lb.	.1180-	—
Lead monosilicate, bgs., c.l., works, frt. equald	lb.	.1385-	—
bgs., l.c.l., same basis	lb.	.1485-	—

Lead naphthenate, liq., 16% Pb., dms., dlvd.	lb.	.19½-	—
24% Pb., dms., dlvd.	lb.	.24¼-	—
Solid, 37% Pb., dms., dlvd.	lb.	.31¾-	—
Lead nitrate, bbls.	lb.	.24¼-	.26¾
Lead orthosilicate gel., 50-60% PbO, dms., works	lb.	.29¾-	.34¼
Lead peroxide, tech. powd., bbls	lb.	.45 -	.50
Lead phthalate, dibasic, dms., works.	lb.	.41 -	—
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equald.	lb.	.1475-	—
bbls., l.c.l., same basis	lb.	.1575-	—
Lead, red, 97% Pb_3O_4, bbls., c.l., same basis	lb.	.1495-	—
bbls., l.c.l., same basis	lb.	.1595-	—
Lead, red, 98% Pb_3O_4, bbls., c.l., same basis	lb.	.1510-	—
bbls., l.c.l., same basis	lb.	.1610-	—
Lead, resinate, precip., 23%Pb, dms.,	lb.	.49 -	—
Lead salicylate, normal dms., works	lb.	.46	—
Lead silicate (see Lead white basic silicate).			
Lead silicochromate, bgs., c.l., f.o.b. mfrs. point, frt. alld	lb.	.20 -	—
bgs., l.c.l., same basis	lb.	.21 -	—
Lead sulfate (see Lead blue basic sulfate).			
Lead tallate, liq., 16% Pb, dms	lb.	.17¼-	—
24% Pb, dms.	lb.	.21¼-	—
Solid, 30% Pb, dms.	lb.	.26¾-	—
Lead, white, basic carbonate, bgs., c.l., shipt pt., frt. alld lb.	lb.	.18 -	—
bgs., l.c.l., same basis	lb.	.19 -	—
basic silicate, bgs., c.l., shipt. pt., frt. alld	lb.	.16½-	—

Science for the world's well-being



PFIZER OFFERS FAST DELIVERY ON A FULL RANGE OF

ORGANIC ACIDS

■ Highly effective sequestering agents, reactive intermediates, non-corrosive cleaning agents, non-toxic acidifiers—and other versatile acids are available in convenient forms from Pfizer warehouses across the country. You get what you want when you want it—from Pfizer.

CITRIC ACID—available from Pfizer in hydrous and economical anhydrous forms; various salts of the acid also available.

GLUCONIC ACID—available from Pfizer in a 50% aqueous solution; various salts of the acid also available.

TARTARIC ACID—shipped by Pfizer in powdered and fine granular forms.

FUMARIC ACID—available in fine granular and powdered forms.

OXALIC ACID—sold by Pfizer in granular and fine granular forms.

ERYTHORBIC ACID—(formerly isoascorbic acid) supplied in granular and powdered forms.

ITACONIC ACID—now available from Pfizer in commercial quantities and at a lower price than ever before.

Chas. Pfizer & Co., Inc., Chemical Sales Div., 630 Flushing Ave., Bklyn. 6, N.Y. Branch Offices: Clifton, N.J.; Chicago, Ill.; San Francisco, Cal.; Vernon, Cal.; Atlanta, Ga.; Dallas, Tex.; Montreal, Can.

Lead—Manganese Resinate

Lead, white, basic silicate, bgs., c.l., shipt. pt., frt. alld	lb.	.17	- —
bgs. l.c.l. same basis	lb	.18	- —
Lecithin, edible tech. bleached, non-ret dms., c.l. works,	lb.	.14	- .15
non-ret dms., l.c.l., same basis	lb.	.15	- .16
Lecithin, edible tech. unbleached, non-ret dms. c.l., same basis	lb.	.13	.14
non-ret dms. c.l., same basis	lb.	.14	.15
Lemon bioflavonoid complex 100-lb. package works	lb	6.45	—
Lemon oil, USP Calif., cns. dms	lb	1.25	1.50
Messina cns	lb	3.25	4.00
Lemongrass oil, cns., dms	lb	2.10	- —
dl-Leucine, dms., 1 kilo, works	kilo.	50.00	- —
Licorice root gran bls	lb	13	—
Powd. bls.	lb	15	.16
Whole bls.	lb	09	.10
Lignaloe wood oil, Mexican, cns	lb.	2.75	3.50
Lignosultonate (see under Ammonium or Sodium lignin sultonate)			
Lilac oil	lb.	1,500.00	
Lime chemical (quicklime), bulk, c.l. 50,000 lbs. works, E	ton	14.25	- —
Chemical, hydrated, bgs., c.l. same basis	ton	17.25	—
spray, bgs., c.l. same basis	ton.	18.25	—

For New York delivery, add $6.29 freight charge

Lime oil, dist., Mexican, cns	lb.	5.35	- 5.60
West Indian, cns	lb.	5.00	- 5.60
Expressed West Indian, cns	lb	7.75	8.75

Lime salts (see Calcium).

Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).

Linalool ex bois de rose oil dms	lb	2.45	4.25
Syn. 98-100% dms., works	lb	2.40	2.75
Linalyl acetate ex bois de rose 90-92%, dms	lb	2.65	4.50
96-98% dms	lb	3.25	—
Syn., 98-100% dms., works	lb	2.75	—
Lindane, 25% formulation, to distributors dms. frt alld	lb.	1.35	- 1.50
Lindane, tech. to formulators, 250-lb dms. 5,000 lbs. dlvd.	lb	2.13	- —
100-lb dms. 5,000-lbs. dlvd.	lb	2.15	- —
250-lb dms. less than 5,000-lbs., dlvd	lb	2.18	- —
100-lb dms. less than 5,000-lbs., dlvd	lb	2.20	—
Linden flowers, with leaves bls	lb	.35	.40
Without leaves bls.	lb.	.42	.45
Linseed meal, expeller, 32% bulk, Minneapolis, mills	ton.	58.50	- —
Extracted, 34% bulk, same basis	ton.	52.00	- —
Linseed oil, raw, dms., c.l., New York	lb.	.1590-	—
dms., l.c.l., New York	lb.	.1680-	.1730
tanks, f.o.b. Minneapolis	lb.	.1230-	—
tanks, New York	lb.	.1341-	—
tankwagon, New York	lb.	.1401-	—

Boiled linseed oil, .006c. per lb. higher.

Linseed oil, acid, dist., dms.	lb.	.1560-	—
Water-white, dms.	lb.	.2280-	—
Litharge, comi. powd. obls., c.l., works, frt equald	lb.	.1425-	—
bbls., l.c.l., same basis	lb.	.1535-	—
Lithium aluminum hydride, lump, dms., works	lb.	33.00	39.00
Lithium benzoate, dms.	lb.	1.65	1.67
Lithium bromide, NF, gran., bgs., works, frt. equald	lb.	2.60	—
Lithium carbonate NF, dms., c.l., t.l. dlvd	lb.	1.29½-	—
dms., ton lots to t.l., dlvd	lb.	1.30	1.30½
Tech., dms. c.l., frt. alld	lb.	.67	- —
dms. t.l., same basis	lb.	.73	- —
dms., ton lots same basis	lb.	.76	- —
dms., smaller lots, f.o.b., plant.	lb.	.81	- —
Lithium chloride CP, anhyd., dms., ton lots	lb.	1.23½-	—
Tech., anhyd. dms., c.l., t.l., dlvd. or works, frt. alld	lb.	.87	- —
dms. l.c.l. same basis	lb.	.88	- .92
Lithium citrate NF dms. ton lots.	lb.	1.50	- —
Lithium fluoride dms., 20,000-lb. lots, dlvd	lb.	1.75	- —
bbls., ton lots and more, dlvd	lb.	1.85	- —
bbls., less ton lots, dlvd	lb.	1.90	- —
Lithium hydride, powd., dms., 500-lbs lots or more, works.	lb.	9.50	- —
Lithium hydroxide, monohydrate, dms. c.l. t.l., frt. alld	lb.	.72	- —
dms., l.c.l. frt alld.	lb.	.73	- —
Lithium manganite, dms. works	lb.	.95	1.05
Lithium nitrate tech. dms., 100-lb lots	lb.	1.15	1.25
Lithium salicylate dms.	lb.	1.60	1.70
Lithium silicate, dms., works	lb.	1.10	1.20
Lithium stearate, dms. c.l., works.	lb.	47½-	—
dms., ton lots works	lb.	48½-	—
dms., less-ton lots, works	lb.	53½-	—

Lithium sulfate, dms., 100-lb. lots.	lb.	1.15	- 1.35
Lithium titanate, dms., works	lb.	1.15	- 1.35
Lithol red toner, barium, bbls., works	lb.	.98	- —
Lithol-rubine red toner, pure, bbls., works	lb.	1.50	- —
Resinated, bbls., works	lb.	1.47	- —
Lithopone ord. bgs., c.l., dlvd E.	lb.	.08¾-	—
bgs., l.c.l., dlvd. E	lb.	.09⅛-	—
Titanated (high-strength), bgs., c.l., dlvd	lb.	.11	- —
bgs., l.c.l., dlvd.	lb.	.12	- —
Lobelia herb, bls.	lb.	1.10	- 1.15
Lobeline sulfate, bots., 50-oz. lots, works	oz.	30.00	—
Locust bean gum, powd., bgs.	lb.	.35	.40
Lycopodium, cs.	lb	3.25	3.50
1-Lysine monohydrochloride, 25-lb. dms	lb.	4.95	- —

M

Mace, Siauw, No. 1, bls.	lb.	1.60	- —
No. 2, whole, bls.	lb.	1.40	- —
siftings, bls	lb	1.35	- —
Mace oil, dist., cns., dms	lb.	9.00	-11.00
Magnesia, calcined, tech., bgs., c.l.s., frt equald	lb.	25¾-	26⅛
Tech. syn., rubber grade, light, bgs., c.l., frt. equald	lb	28¾-	.30
rubber grade, extra light, bgs., c.l., frt. equald	lb	28	—
bgs., t.c.l., frt. equald	lb	28¾	—

Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points

Magnesia, calcined, tech., heavy, 85% bgs. c.l. f.o.b. Manning, Nev	ton	39.50	—
91%, bgs., c.l., same basis	ton	49.50	—
95%, bgs., c.l. same basis	ton	59.00	—
USP, light, bgs.	lb	36½-	.37½
USP, heavy, bgs.	lb	36½-	.37½
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt equald	ton	86.25	- —
Chemical grade, deadburnt, standard grain, bulk, c.l. Chawelah, Wash	ton	46.00	- —
Magnesium bromide, 80-lb. dm., f.o.b. works	lb.	1.15	- —
Magnesium carbonate, tech. bgs., c.l., frt. equald	lb.	.11	—
bgs., t.l., frt equald	lb.	.11½-	—
bgs., l.c.l., frt equald	lb	.13½-	.14
Magnesium carbonate, USP, bgs., c.l., frt. equald	lb.	.13½-	—
bgs., t.l., frt equald	lb	.14	—
bgs., t.c.l., frt equald	lb	15	16

Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points

Magnesium chloride, anhyd 92%, flake or pebble, drums., c.l. works	lb	12¾-	—
dms. l.c.l., works	lb	14	.15
Magnesium chloride, hydrous, 99% flake, bgs., c.l., works	ton.	60.00	—
bgs., l.c.l., works	ton	75.00	-100.00
Magnesium gluconate 100-lb dm f.o.b works	lb.	1.42	—
Magnesium hydroxide, NF powd., dms., 500-lbs. or more, f.o.b works	lb.	.24½-	25⅛
Magnesium lauryl sulfate, dms., c.l., frt alld	lb.	.22½-	—
dms., t.l.l., frt alld	lb.	.23½-	—
tanks, frt alld.	lb.	.21½-	—
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works	lb	.36	- —
pigs, 10,000-lb. lots or more, works	lb.	.35½-	—
sticks, cs., works, frt alld on carlots	lb.	.59	- —
Magnesium nitrate, cryst., dms., works	lb	.29	- —
Magnesium oxide (see Magnesia calcined).			
Magnesium phosphate, tribasic, NF, bbls	lb.	.75	- —
Magnesium silicate (see Talc)			
Magnesium silicofluoride, dms., works	lb	.10½-	.12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs.		2.15	—
bgs, l.c.l., works 100 lbs		2.90	- 3.15
USP, cryst., bgs., c.l., works, 100 lbs.		2.35	- —
bgs. l.c.l., 5,000 lbs., 1 withdrawal 100 lbs		3.10	- —
bgs., smaller lots 100 lbs.		3.35	- —
Magnesium trisilicate, USP, fib dms., 5,000-lb. lots	lb	.38	- —
fib dms., 1,000-lb. lots	lb.	.40	- —
fib dms., 100-lb. lots	lb.	.45	- —

Bulky and super grades of magnesium trisicilate 7c. per lb. higher.

Malachite green, straight, PTA, bbls., works	lb.	5.30	- —
Malathion, dms., c.l., works	lb.	.89	- —
dms., l.c.l., works	lb.	.92	1.01
Maleic acid, cryst., powd., dms	lb.	37¼-	—
Maleic anhydride, dms., c.l. frt equald	lb.	.24	—
dms., l.c.l., frt. equald	lb.	25½-	—
tanks, frt equald	lb.	22½	—
Maleic anhydride in bags ½c. per lb. less.			
Malic acid, tech., dms	lb	.50	—
Mandelic acid, NF, dms., 1,000-lb lots	lb	2.35	—
dms, smaller lots	lb	2.40	2.50
Mandrake root, bls.	lb.	.45	- —
Manganese acetate, dms., dlvd	lb.	.35	- —
Manganese borate, tech., fib. dms.	lb.	.23½-	—
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works	lb.	.11	- .16
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works	lb.	.21¾-	—
smaller lots, works	lb.	.23½-	—
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb lots, burlap paper lined bgs., gross for net works	ton.	148.00	- —
40,000 to 99,999-lb lots, paper bgs., same basis	ton.	144.50	- —
40,000 to 99,999-lb. lots, dms same basis	ton.	152.50	- —

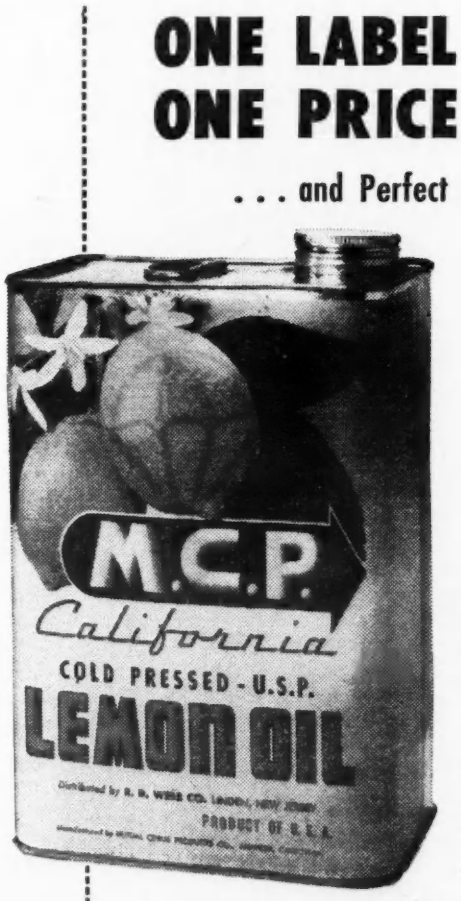
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.

Manganese gluconate, dms	lb.	1.84	- —
Manganese hydrate, dms., dlvd	lb.	.35	- —
Manganese hypophosphite, NF, dms.	lb.	3.52	- —
Manganese linoleate, liq., 4.35% Mn, dms	lb.	.35¾-	—
Solid, precip., 8.2% Mn. bbls	lb.	.41¼	—
Manganese metal, electrolytic, dms., c.l., dlvd. E	lb.	.34½-	—
dms., ton lots, dlvd. E	lb.	.37	- —
dms., smaller lots, dlvd E	lb.	.39	- —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld	lb.	.29¾-	—
Manganese resinate, fused, 3½% Mn dms	lb	29¼-	—
Precip., 6¼-7% Mn, dms.	lb.	.42	- —

ONE LABEL — *First Grade Only*

ONE PRICE — *That Saves You Money*

. . . and Perfect Performance for *Every* Purpose!



M. C. P.

Pure
Unadulterated
California

LEMON OIL

U. S. P.

An *Exclusively First Grade Lemon Oil* . . . Cold Pressed in California . . . and *Packed by the Producer* to Assure Highest Quality

For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one label* and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

Produced and Packed by

MUTUAL CITRUS PRODUCTS COMPANY

Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

R. D. WEBB & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

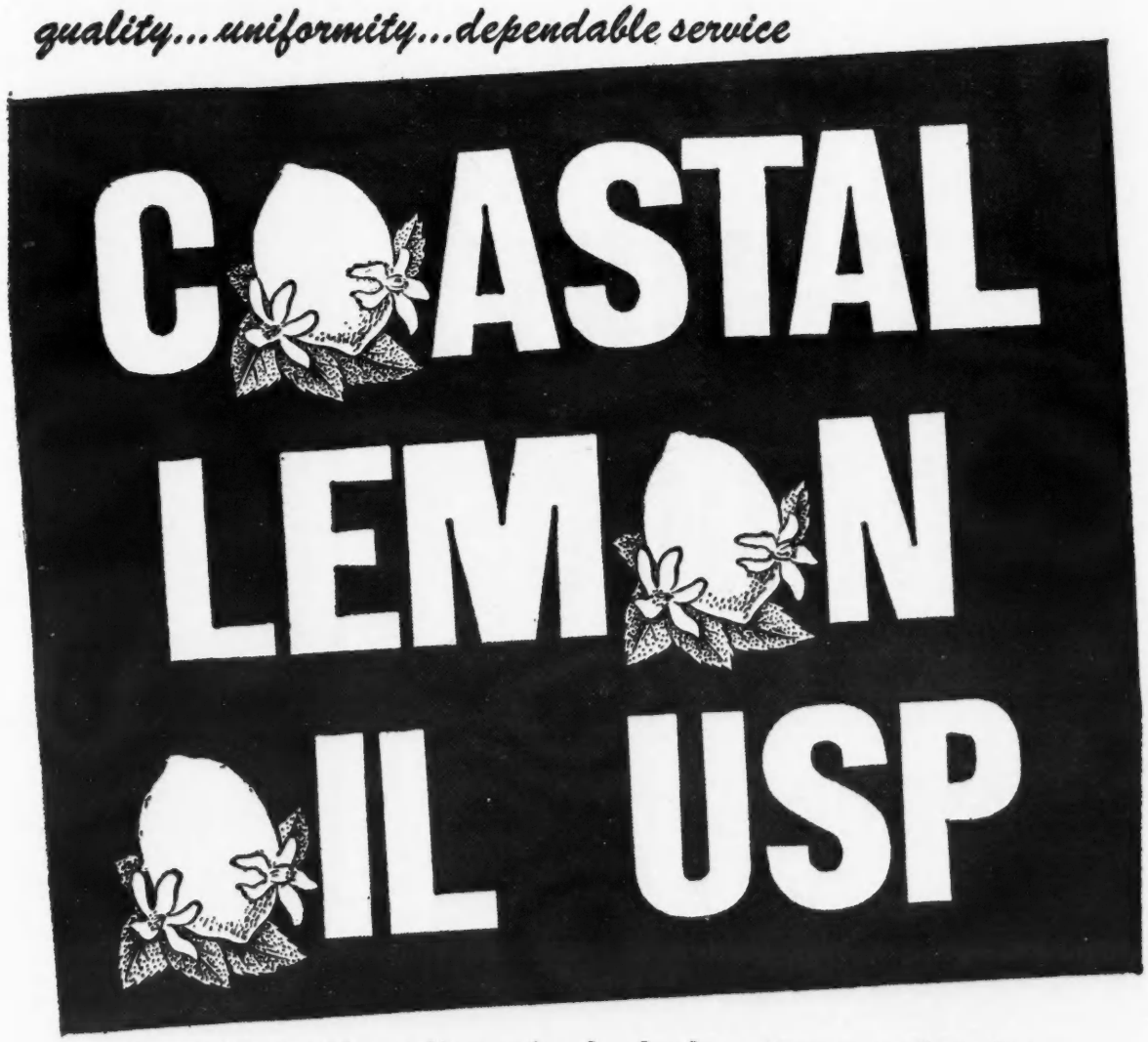
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd., S., E. ton 86.50 - —
bgs., l.c.l., dlvd. S., E. ton 93.50 - —
Manganese tallate, 6%, dms. lb. .26½- —
Manila copal gum, C, bgs. lb. .35 - .39
DBB, bgs. lb. .25 - .28
DK, dust, bgs. lb. .14 Nom.
MA, soft, bgs. lb. .20 - .24
WS, bgs. lb. No stocks.
Mannitol, com'l, fib, dms., ton lots, works lb. .60 - —
fib. dms., to ton lots, works lb. .62 - —
fib. dms., single dm., works lb. .65 - —
Marine pitch, dms. lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .26½- —
bgs., l.c.l., works lb. .28 - —
Menadione, USP bots. gram. .044 - .05
Menhaden oil, crude, tanks, works, Atl. & Gulf lb. .06¼- —
Menthol, nat., USP, Brazilian, large crystals, cs lb. 8.75 - 9.00
Nat., USP, Brazilian, regular crystals, cs. lb. 8.60 - 8.85
Japanese, cs. lb. 10.50 -12.00
Syn., USP, racemic, 25-lb. lots lb. 4.25 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 - —
bgs., fib. dms., less ton lots, same basis lb. .48 - —
Mercaptobenzothiazyl disulfide, bgs., fib dms., ton lots, works, frt. alld lb. .54 - —
bgs., fib dms., less ton lots, same basis lb. .56 - —
Mercuric chloride, NF, cryst., dms., 100 lbs., f.o.b works lb. 4.03 - —
USP, gran or powd., 50-lb. dm., 100 lbs. f.o.b. works lb. 3.78 - —
Mercuric cyanide, NF VIII, powd., fib dms lb. 3.84 - —
Mercuric iodide, red, NF, 100-lb. dm. f.o.b. works lb. 6.97 - —
Mercuric oxide, red, NF IX, 50-lb. dm. 100 lbs. f.o.b works. lb. 4.72 - —
tech., 50-lb dm. 100 lbs., same basis lb. 4.52 - —
Mercuric oxide, yellow, NF, 50-lb. dm. 100 lbs., same basis. lb. 4.89 - —
tech., dms. 100 lbs. lb. 4.35 - —
25-lb fib dm lb. 4.38 - —
Mercurous chloride (see Calomel).
Mercurous iodide, yellow, NF, 100-lb. dm f.o.b works lb. 8.23 - —
Mercury, ammoniated (see White precipitate USP XV).
Mercury metal 76 lbs. per flask, net-flask 209.00 -212.00
Mesityl oxide dms., c.l., dlvd lb. .15 —
dms., l.c.l., dlvd. lb. .16½- —
tanks dlvd lb. .12½- —
Meta aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid dms. works lb .57 .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-Tolylenediamine).
Methacrylic acid glacial 98%, dms., truckloads frt equald lb. .42½- —
dms. smaller lots, frt equald. lb. .43 - .75
tanks works frt. equald lb. .40 - —
tanks frt alld gal. .85 - —
Methanol, nat, denaturing grade, Syn. zone 1, dms., c.l., or t.l. min., dlvd gal. .51½- —
dms. l.c.l., dlvd gal. .61½- —
tankwagon, 2,000-4,000 gal. lots dlvd Metropolitan area gal. .35 - —
tankwagon, 4,000 gal. min., dlvd gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b terminal gal. .29 - —
Methanol, syn., zone 2, dms., c.l., or t.l., min frt. alld. or dlvd. gal. .55½- —
dms., l.c.l., works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 - —
tanks, 4,000 gal. min., dlvd. gal. .34 - —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 27.25 - —
Methenamine (see Hexamethylene-tetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt alld. lb. 1.10 - —
dms., t.t.l., same basis lb. 1.16 - —
dl-Methionine, fib dms., frt. alld., 50-lb or more lb. 3.50 - —
Feed grade, 98% fib dms., same basis lb. 1.43 - —
Methoxychlor, 50% wettable powder, dealers, dms., cs lb. .66 - —
Methyl abietate, non-ret dms., c.l., dlvd zone 1 lb. .21½- —
non-ret dms., l.c.l., same basis lb. .22 - .22½
Methyl abietate, hydrogenated, non-ret dms., c.l., dlvd. zone 1 lb. .23½- —
non-ret. dms., l.c.l., same basis. lb. .24 - .24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Methyl acetone, nat., dms., l.c.l., E of Miss., frt. alld gal. .62½- —
Methyl acetone, syn., dms., c.l., frt. alld E gal. .66 - —
Methyl acetone, syn., dms., l.c.l., frt. alld. E. gal. .76 - —
tanks frt alld. E. gal. .51 - —
Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., dlvd. lb. .36¼- —
dms, l.t.l., dlvd lb. .35¼- —
tanks, dlvd. lb. .32¼- —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E. lb. .17 - —
dms., l.c.l., dlvd. E. lb. .18½- —
tanks, dlvd. E. lb. .14½- —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Methyl amyl ketone, dms., c.l., t.l., f.o.b. works lb. 1.99¼- —
N-Methylaniline, tech., tanks, frt. alld. lb. .60 - —
Methylanthranilate, cns. lb. 2.25 - 2.45
Methyl benzoate, cns., dms. lb. .60 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .63 - .72
on 100 lbs. lb. .73 - .79

Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .83 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb. bgs., smaller lots, frt. alld. on 100 lbs lb. 1.05 - —
Methyl cellulose, standard vis. (15,-400 cps.) 50-lb. bgs., c.l., frt. alld lb. .69 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .76 - —
50-lb. bgs., smaller lots, frt. alld.
Methyl chloride, indust., cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb. .12¾- —
Methyl chloride, refrigerator mfrs., cyls., dlvd lb. .48¾- —
Other consumers or service men, cyls., dlvd lb. .67¾- —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns lb. 1.55 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd lb. .16½- —
tanks, dlvd. lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
dms., l.c.l., works lb. .45¾- —
tanks, works lb. .43 - —
Methyl formate, refd., dms lb. .35 - .40
Tech., non-ret, dms., any quantity, works lb. .10 - —
tanks, works lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .21 - —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works. lb. .21½- —
100-lb. multiwall paper bgs., l.t.l., works lb. .23 - —

Methyl heptin carbonate, bots lb. 27.75 -31.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 3.85
Methyl isoamyl ketone, dms., c.l., dlvd lb. .20 —
dms., l.c.l., dlvd. lb. .20½- —
tanks, dlvd. lb. .17½- —
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 - —
dms., l.c.l., dlvd lb. .18½- —
tanks, dlvd lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W. Va lb. .31 - —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns lb. 2.45 - 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate).
Methyl parathion, tech., 80%, dms., frt. alld. E lb. .84 - —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb. fib. dms lb. 6.90 - —
Methyl salicylate, dms., t.l., frt. alld lb. .60¼- —
dms., l.c.l., same basis lb. .62½- .67½
Methyl testosterone, USP, 100-gram. bots gram. No Prices.

2-Methyl-5-vinyl pyridine, 40-dm lots or more, f.o.b. works lb. 1.32 - —
5-39 dm. lots, same basis lb. 1.37 - —
tanks, same basis lb. 1.27 - —
Methyl violet toner, molyhdated, PMA bbls., dlvd. E of Rockies lb. 2.80 - —
Tungstated, PTMA, bbls., same basis lb 4.35 —
Methyl violet prices 1c. higher W of Rockies
Methylene blue, fib. dms. 100-lb lots, frt. adjusted lb. 4.67 - —
Methylene chloride tech., straight or assorted dms., c.l., or t.l., dlvd lb. .13½ —
dms., l.c.l., t.l.l. dlvd lb. .15¾ —
tanks, 4,000-gal. min. dlvd lb 12¼ —
tanktrucks, 1,000-gal min. dlvd. lb. 13¼- —
b-Methylnaphthalene 32°C., m.p., dms., works lb .90 —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazione (see 1-phenyl-3-methyl-pyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs., c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
wet-grd., biotite, bgs., c.l., works, frt. alld.E lb. .06½- —
bgs., l.c.l., ex-whse. lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld E. lb. .08¼- —
bgs., l.c.l., ex-whse or freight alld. E lb. .09 - —

quality...uniformity...dependable service



PURE California cold pressed lemon oil produced under continuous scientific quality control . . . bulk blended for uniformity, from desert and coastal grown lemons . . . packaged in tamper-proof containers for your protection . . . and priced to save you money. Our research and laboratory facilities have helped many users with product improvement and cost reduction...perhaps we can help you.

VENTURA PROCESSORS, Ventura, California

DISTRIBUTED BY:

International Flavors & Fragrances, Incorporated
417 Rosehill Place, Elizabeth 2, New Jersey

Ventura Processors, 2325 Vista Del Mar Drive, Ventura, California

Mica, wet-grd., rubber, bgs., c.l., works, frt. alld. E lb. .08 • —
bgs., l.c.l., ex-whse, or frt. alld. E lb. .08¼ • —
wallpaper, bgs., c.l., works, frt. alld. E lb. .08¼ • —
bgs., ex-whse or frt. alld. E. lb. .09 • —
white, 5-10 microns, bgs., c.l., works, frt. alld. E. . . lb. .08¼ • —
Mica, wet-grd W. of Miss. ½c. higher; W. of Rockies 1c higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 • .11
laminating grades, tankcars, works lb. .11 • .12
Mineral black, bgs., works lb. .0160- .0673
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .65 • —
50-65 vis. non-ret. dms., l.c.l., basis gal. .70 • —
tankcars, refy. gal. .49 • —
Mineral oil, white, tech., 65-75 vis., non-ret. dms., c.l., same basis gal. .65 • —
non-ret. dms., l.c.l., same basis gal. .70 • —
tankcars, refy. gal. .49 • —
NF, 80-90% vis., non-ret. dms., c.l., same basis gal. .66 • —
non-ret. dms., l.c.l., same basis gal. .71 • —
tankcars, refy. gal. .50 • —

Mineral oil, white, NF, 135-138 vis., non-ret. dms., c.l., same basis gal. .72 • —
Mineral oil, white, NF, 135-138 vis., non-ret. dms., l.c.l., same basis gal. .77 • —
tankcars, rfy. gal. .56 • —
Mineral oil, white, NF, 145-155 vis., 5 non-ret. dms., c.l., same basis gal. .78 • —
non-ret. dms., l.c.l., same basis gal. .83 • —
tankcars, refy. gal. .62 • —
Mineral oil, white, USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .80½ —
non-ret. dms., l.c.l., same basis gal. .85½ —
tankcars, refy. gal. .64½ —
Mineral oil, white, USP, 200-210 vis., non-ret. dms., c.l., f.o.b. refy gal. .82½ —
non-ret. dms., l.c.l. gal. .87½ —
tankcars, refy gal. .66½ —
Mineral oil, white, USP, 340-350 vis., non-ret. dms., c.l., f.o.b. refy gal. .87½ —
non-ret. dms., l.c.l. gal. 92½ —
tankcars, refy. gal. .71½ —
(For f.o.b N. Y. add 2c. for tankcars; 2c. for c.l., and 3c. for l.c.l. non-ret. dms.).
Mineral orange, American, bbls., c.l., works lb. .17 • —
bbls., c.l., same basis lb. .18 • —

Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 • —
New York gal. .305 • —
Houston, Texas gal. .25 • —
regular, tankcars, New Jersey and New York gal. .18 • —
Group 3 gal. .12875- —
Houston, Texas gal. .145 • —
Mineral spirits, 140 F, flash, New York, New Jersey at terminal gal. .205 • —
Houston, Texas gal. .17 • —
Mink oil, dms. lb. 2.75 • —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner, kgs., c.l., works lb. 6.30 • —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .12½- .13
tanks, New York gal. .14 • .14½
Molybdated orange, bbls. lb. .49 • —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 • —
325 mesh, ctns., works kilo. 9.13 • —
Molybdenum trioxide, purif., dms., works lb. 1.15 • —
Tech., chemical, dms., works, basis Mo content lb. 1.48 • —
Tech., metallurgical, dms., works, basis Mo. content lb. 1.47 • —
Molybdic acid, 85%, dms., works. lb. 1.05 • 1.15
Monoallylamine, dms., c.l., divd lb. .965 • —
dms., c.l., dlvd. lb. .995 • —
tanks, dlvd lb. .96 • —
Monobutylamine, dms., c.l., dlvd. E. of Rockies lb. .57½ —
dms., l.c.l., same basis lb. .59 • —
tanks, same basis lb. .55 • —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 • —
dms., l.c.l., works lb. .56 • —
tanks, works lb. .54 • —

Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10½- —
dms., l.c.l., same basis lb. .11½- —
tanks, same basis lb. .08¾- —
Monoethanolamine, dms., c.l., dlvd. E lb. .27½- —
dms., l.c.l., same basis lb. .29 • —
tanks, same basis lb. .25 • —
Monoetnylalphanaphthylamine (see
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E, 100% basis lb. .38½- —
dms., l.c.l., dlvd. E., 100% basis. lb. .40 • —
tanks, dlvd. E., 100% basis lb. .35 • —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27½- —
dms., l.c.l., same basis lb. .29 • —
tanks, same basis lb. .25 • —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½- —
dms., l.c.l., same basis lb. .35 • —
tanks, same basis lb. .31 • —
Monomethylamine, anhyd., cyls., l.c.l., frt. equald., 100% basis lb. .30 • —
tanks, 100% basis lb. .26 • —
30-35% soln., dms., c.l., frt. equald., 100% basis lb. .36 • —
Monomethylamine, 30-35% soln., dms., l.c.l., frt equald, 100% basis lb. .36½- —
tanks, frt. equald., 100% basis. lb. .26 • —
40% soln., dms., frt. equald., 100% basis lb. .33 • —
dms., l.c.l., frt. equald., 100% basis lb. .33½- —
tanks, frt. equald, 100% basis lb. 26 • —
Monopentaerythritol, tech., bgs., c.l., dlvd. E lb. .31 • —
bgs., l.c.l., dlvd. E lb. .32 • —
Monopotassium glutamate, dms., 1,000-lb lots, frt alld lb 3.05 • —
dms., 100-lb lots, same basis lb 3.25 • —
Monosodium glutamate, dms., dlvd. lb. 1.07 1.13
Monosodium phosphate (see sodium phosphate, monobasic).
Montan wax, Calif., refd., bgs lb .27 .28
Imp., crude, Bohemian, bgs. . . . lb. .25 • .26
German, bgs. lb. .25 .26
Morphine, cns., 100-oz., f.o.b. works. oz. 12.35 • —
Morphine hydrobromide, cns., 100-oz., f.o.b. works oz. 9.90 • —
Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works oz. 9.90 • —
Morphine sulfate, USP, cns., 100-oz., f.o.b. works oz. 9.90 —
Morpholine, dms., c.l., dlvd. E lb. .55¼- —
dms., l.c.l., dlvd. E lb. .56¼- —
tanks, dlvd. E lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb lots lb. 4.40 4.90
cns., 25-lb lots lb 4.50 5.00
Ketone fib. dms., 100-lb. lots lb. 4.60 5.10
cns., 25-lb. lots lb. 4.70 5.20
Xylol, fib. dms., 100-lb. lots lb. 1.26 —
cns., 25-lb lots lb. 1.40 —
Mustard seed, Danish, yellow, bgs. lb. .12 • —
Montana, yellow, bgs lb. 10½- —
Oriental, bgs lb 08 —
Mustard, oil, syn., bots. lb 1.60 1.85
Myristic acid, bgs. lb. .25¼- .27¾
tanks lb. .24¼- —
Myrrh gum, cs. lb. .65 .75

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).
Naphtha, VM&P, petroleum, tankcars, New Jersey and New York gal. .19 • —
Group 3 gal. .13875- —
Houston, Texas gal. .155 • —
Naphthalene, crude, dom., 78°, tanks, frt. equald lb. .06 • —
imp., 78°, bgs., large lots lb. .09½ Nom.
Refd., indust., chipped, crushed, bgs., frt. equald lb. .13½- —
tanks, same basis lb. .10¾- —
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis. lb. .15½- —
cs., 50 lbs., c.l., same basis. lb. .15¾- —
1-lb. pkgs., c.l., same basis. lb. .18½- —
a-Naphthol, dms., frt. alld lb. 1.02 • —
b-Naphthol, tech., flake, bbls., c.l., works lb. .34 • —
bbls., l.c.l., works lb. .36 • —
Naphthol, ITR, red toner, bbls., works lb 5.00 • —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid).
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid).
a-Naphthylamine, dms., frt. alld lb. .52 • —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 • —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid).
Naringin, fib. dms. lb. 8.50 • —
Neatsfoot oil, 15° cold test, dms lb. .29 Nom.
20° cold test, dms. lb. .28 Nom.
30° cold test, dms. lb. .27 Nom.
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .25 • —
fib. dms., 100-999-gram lots, basis activity gram. .30 • —
Tech., fib. dms. gram. .13½- —
Neopentylglycol, dms., c.l., dlvd lb. .32 • —
dms., l.c.l., same basis lb. .33 • —
Nerol, dms. lb 4.75 —
Neroli oil, NF, French, bots. lb. 425.00 575.00
Tunisian, bots. lb. 400.00 —
Nerolin, cns. lb. 2.45 2.85
Neville and Winther's acid, dms., frt. alld lb. 1.40 • —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd. lb. .68½- .75½
Nickel carbonate, bbls., dlvd lb. 78¼- .85½
Nickel chloride, bbls., dlvd. lb. .37 • .45
Nickel formate, bbls., ton lots, frt. alld lb. .72 .73
Nickel metal, electro cathodes, cs., works lb 74 —
Nickel nitrate, dms., frt. alld. lb. .31½- .33½
Nickel oxide, black, bbls. lb. .85 • —
Green, bbls. lb. .84 • —

Now available

n-alkyl bromides

METHYL
ETHYL
BUTYL
HEXYL
LAURYL
MYRISTYL
CETYL
STEARYL

Alkylations made easier . . . easier because alkyl bromides are more reactive, and losses are minimized by lower volatility than with their conventional chlorine analogs. Consider the short chains as alkylating agents to form organo-metallics or pharmaceutical intermediates. Employ the long chains to impart germicidal or algicidal activity to quaternary derivatives.

You can secure any of these alkyl bromides — in sample or commercial lots — now from inventory. If other similar compounds are of interest to you, we will be glad to discuss making them for you. Send for samples and data today.

Typical Properties of Michigan Chemical n-Alkyl Bromides

n-Alkyl	Formula	Assay %	Boiling Point °C.	Sp. Gr. (20°/20°C.)	n-Alkyl	Formula	Assay %	Boiling Point °C.	Sp. Gr. (20°/20°C.)
Methyl	CH_3Br	99.8	3.7	1.732††	Lauryl	$C_{12}H_{25}Br$	61.5†	151-208 (45 mm Hg)	1.030
Ethyl	C_2H_5Br	99.8	38.4	1.455	Myristyl	$C_{14}H_{29}Br$	50†	158-186 (10 mm Hg)	1.000
Butyl	C_4H_9Br	99.7	101.6	1.279	Cetyl	$C_{16}H_{33}Br$	80†	183-216 (10 mm Hg)	0.997
Hexyl	$C_6H_{13}Br$	96	155.5	1.165	Stearyl	$C_{18}H_{37}Br$	86†	Decomposes	0.976†††

†Contains other long chain alkyl bromides ††0°C./0°C. †††25°C./25°C.

MICHIGAN CHEMICAL CORPORATION

706 North Bankson Street, Saint Louis, Michigan

Eastern Sales Office: 230 Park Avenue, New York 17, New York

Copyright 1960 Michigan Chemical Corporation C-60-6

Nickel sulfate, bgs., c.l., dlvd....lb. .28 - —
bgs., l.c.l., dlvd....lb. .28½- .36
Nicotinamide USP, 50-kilo., dms., 100 kilos., dlvd. kilo. 5.75 - 6.50
dms., less than 100 kilos, dlvd. kilo. 6.60 - 7.00
Nicotine sulfate 40%, dealers, 50-lb. dms frt alld lb 1.20 - —
40%, manufacturers, 500-lb. dms., frt. alld lb. 1.05 - —
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs. ....lb. .10¼- —
Nikethamide, cbys. ....lb. 5.00 - —
Nitric acid 36° Be., cbys., c.l., works E 100 lbs. 5.75 - —
cbys., l.c.l., works E 100 lbs. 6.05 6.85
38° Be., cbys., c.l., works E 100 lbs 6.25 —
cbys., l.c.l., works E 100 lbs 6.55 7.35
40° Be., cbys., c.l., works E 100 lbs 6.75 —
cbys., l.c.l., works E 100 lbs. 7.05 7.85
42° Be., cbys., c.l., works E. 100 lbs 7.25 —
cbys., l.c.l., works E 100 lbs. 7.55 8.35
58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
Nitric acid, CP, NF, consumer, cbys., extra, c.l., works ....lb. .18½- —
cbys, extra, l.c.l., works, lb. .20 —
5-pint bots, extra, cs, c.l., same basis lb. .22½- —
5-pint bots, extra, cs., l.c.l., same basis lb. .24 .25
dms, frt alld lb. .99 -
m-Nitroaniline, cryst., dms., frt. alld lb. 1.15 - —
Paste dms, frt alld, 100% basis, lb 1.10 - —
o-Nitroaniline flaked, dms, t.l., frt. alld lb. .49 - —
dms, t.l.l, frt alld ....lb. .51 - —
o-Nitroaniline orange toner kgs, lb 1.35 —
p-Nitroaniline, c.l., t.l., dms., 20,000 lb. min., dlvd lb. .44½- —
dms, l.c.l., same basis lb. .46½ —
o-Nitroanisole tech., tanks, frt alld, lb. .36 - —
p-Nitroanisole, tech., solid, dms., frt alld lb. .72 - —
Nitrobenzene, dbl dist., dms., c.l., frt alld lb. .13 - —
dms., l.c.l., frt. alld. ....lb. .14 - —
tanks, frt. alld. ....lb. .11 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 - —
4-Nitro-2-aminophenol, tech., paste, dms., l.c.l., works ....lb. .64 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .37½- —
bbls., l.c.l., same basis lb. .33½- .40½
18-20, cps., bbls, c.l., same basis lb. .39½- —
bbls., l.c.l., same basis lb. .40½- .42½
250-400, 600-1,000 seconds, bbls., l.c.l. same basis lb. .43 - .46
Nitrocellulose, spirit soluble, 30-35 cps, ¼, ½ seconds, bbls., c.l., same basis lb. .43 - —
bbls., l.c.l., same basis lb. .44 .46
5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .42 —
bbls, l.c.l., same basis lb. .43 .45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms, c.l., frt. alld lb. .15 - —
dms., l.c.l., same basis ....lb. .16 - —
tanks, same basis ....lb. .13 - —
p-Nitrochlorobenzene, dms. ....lb. .26 - .27
2-Nitro-p-cresol, tech., dms., dlvd lb. .88 - —
Nitroethane, dms., c.l., dlvd, E lb. .25 - —
dms., l.c.l., dlvd E ....lb. .26½- —
tanks, dlvd E ....lb. .22½- —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, f.o.b. works, ton.164.00 - —
Nitrogen tetroxide, indust., tankcars, f.o.b Hopewell, Va lb. .065 - —
Cyls., t.l., min 5 tons, same basis lb. .07½- —
Cyls., l.c.l., t.l.l., same basis lb. .15 - —
Nitrogenous process tankage, bulk, works unit-ton. 4.50 - 5.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works, unit-ton. 3.35 - —
Nitromethane dms, t.l., dlvd, E lb. .25 - —
dms, l.t.l., dlvd, E ....lb. .26½- —
Nitromethane prices West of Rockies are 1c higher.
a-Nitronaphthalene, bbls., frt. alld, lb. .31 - —
o-Nitrophenol, dms., works, frt, equald lb. .94 - —
p-Nitrophenol, dms., c.l., frt. alld, lb. .45 - —
dms, l.c.l. frt alld ....lb. .47 - —
1-Nitropropane dms., c.l., frt. alld, E. of Rockies lb. .23½- —
dms., l.c.l., same basis ....lb. .25 - —
tanks, same basis ....lb. .21 - —
2-Nitropropane dms., c.l., frt. alld, E of Rockies lb. .18½- —
dms., l.c.l., same basis ....lb. .20 - —
tanks, same basis ....lb. .16 - —
Nitropropane prices West of Rockies are 1c. per lb. higher.
m-Nitrotoluene tech., dms., frt. alld, lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld lb .15 - —
dms., l.c.l., frt alld. ....lb. .16 - —
tanks, frt. alld. ....lb. .13 - —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½- —
dms., l.c.l., works ....lb. .28 - —
flake, dms., c.l., t.l., works lb. .27½- —
dms, l.c.l. works ....lb. .28 - —
m-Nitro-p-toluidine, dms. ....lb. 1.25 - —
Nonylphenol, dms., c.l, frt, alld, lb. .22½- —
dms., l.c.l., frt. alld....lb. .23½- —
tanks, frt. alld. ....lb. .20 - —
Nonylphenol prices on shipments to Western States are 2c. higher.
Nutmegs, East Indian, whole, bgs. lb. 1.35 - —
West Indian, bgs. ....lb. 1.26 - 1.38
Nutmeg oil USP dist., East Indian, cns. lb. 9.00 -12.00
West Indian, cns. ....lb. 9.00 -12.00
Nux vomica, bls. ....lb. .20 - —
Powd., bbls., bxs. ....lb. .20 - .23

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms....lb. .45 - .48
Octane, indust tanks, Bayonne, N.J. gal. .20 - —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .43½- —
dms., l.c.l., dlvd. Zone 1—lb. .45½- —
tanks, dlvd., Zone 1....lb. .41 - —
Octyl alcohol, perfumers grade, bots, lb. 1.60 - 3.25
Octyl alcohol, tech, (see 1-Octanol, tech).
tert-Octylamine, dms., c.l., t.l., f.o.b. works lb. .54½- —
dms., l.c.l., same basis lb. .55 - —
Octylphenol, bgs., c.l., works..lb. .22½- —
bgs., l.c.l., works ....lb. .23 - —
tanks, works ....lb. .21½- —
Octylphenol in dms., 11c. higher.

OILS
Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms....lb. .15¾- .16¾
tanks ....lb. .13¾- .14
Oleic acid, dbl.-dist. (white), dms, lb. 17 - .19½
tanks ....lb. .14½- —
S. D., dms. ....lb. .16 - .18½
tanks ....lb. .13½- —
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs.... lb. .15 - .20
Tears, cs. ....lb 22 - .30
Olibanum oil, bots....lb 5.00 7.65
Extra fine, bots....lb 8.00 9.50
Olive oil, edible, dms., spot, duty paid gal. 2.25 - 2.30
Olivine, crude, works.... ton.12.00 - —
20 mesh, works.... ton.15.00 - —
100 mesh works.... ton.20.00 - —
Opium, USP, cns., 25-lbs., f.o.b. works oz.19.20 - —
gran., cns., 50 lbs., same basis, oz.21.65 - —
powd., cns., 50 lbs., same basis, oz.21.65 - —
Orange oil, expressed, USP, Calif., cns., dms lb. .70 - .90
Calif., sweet., cns., dms....lb. .60 - —
Florida, cns., dms....lb. .40 - .45
Messina, cns. ....lb. 3.25 - 5.00
West Indian, bitter, cns., dms., lb. 2.50 - 3.50
Orange peel, bitter, Haitian, bls lb. .18 .20
Sweet ....lb. .28 - .30

ORANGE PIGMENTS
Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns....lb. 1.80 2.30
Orris root, Florentine, bls....lb. .55 - —
powd., bbls., bxs....lb. .65 - —
Verona, bls ....lb. .35 - —
powd., bbls., bxs ....lb. .45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitro aniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 3,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol).
Orthotolidine (see o-Tolidine base)
Orthotoluidine (see o-Toluidine).
Ouabain, USP bots. gram 3.00 4.00
Ouricury wax, crude, bgs. ....lb. .54 .55
Refd., pure, bgs. ....lb. .60 .62
Oxalic acid, bgs., c.l., works lb. .18 —
bgs., 10,000-lb. lots, works..lb. .19 —
bgs., smaller lots, works ....lb. .20½- —
Oxalic acid in drums is priced ½c. per lb. higher.
b-Oxynaphthoic acid, pigment manufacture, dms., frt alld lb. .912 - —
Dyestuff manufacture, dms., same basis lb 1.03 1.14
Oxyquinolin sulfate, cns., 100-lb. lots, works lb 4.75 5.00
cns., smaller lots, works ....lb. 4.92 5.17

P

Palm oil, clarif., dms....lb. .1400- .1500
tanks ....lb. .11¼- —
Palm oil acid, double dist., dms.lb. .15¼- .17¼
single dist., dms....lb .14¾- .17¼
tanks ....lb. .12¼- —

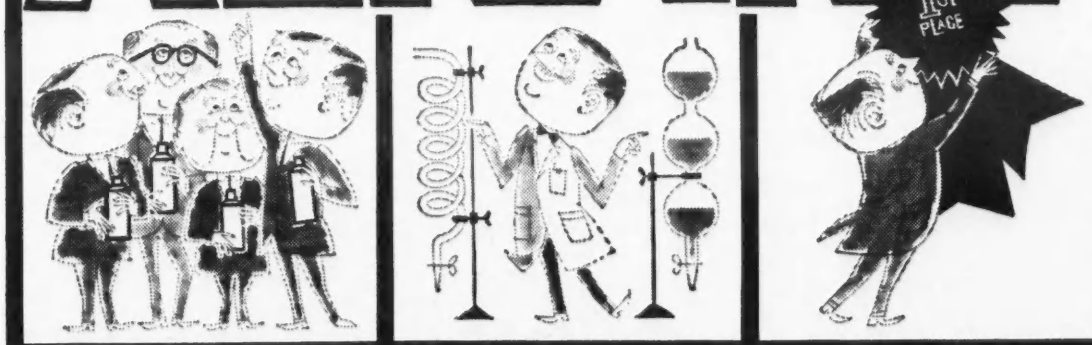
All of the leading detergent producers use ALKANE* based sulfonates in household liquid detergent products

Whether you employ oleum or SO_3 processing, ALKANE will give you the best quality sulfonate for liquids

ALKANE is the world's leading synthetic detergent raw material

ORONITE®

ALKANE



* Oronite's trademark for its detergent intermediate.

CALIFORNIA CHEMICAL COMPANY
ORONITE DIVISION
EXECUTIVE OFFICES • 200 Bush Street, San Francisco 20, California
SALES OFFICES • New York, Boston, Wilmington, Chicago, Cincinnati, Cleveland, Houston, Tulsa, Los Angeles, San Francisco, Seattle
FOREIGN AFFILIATE • California Chemical International, Inc., San Francisco, Geneva, Panama

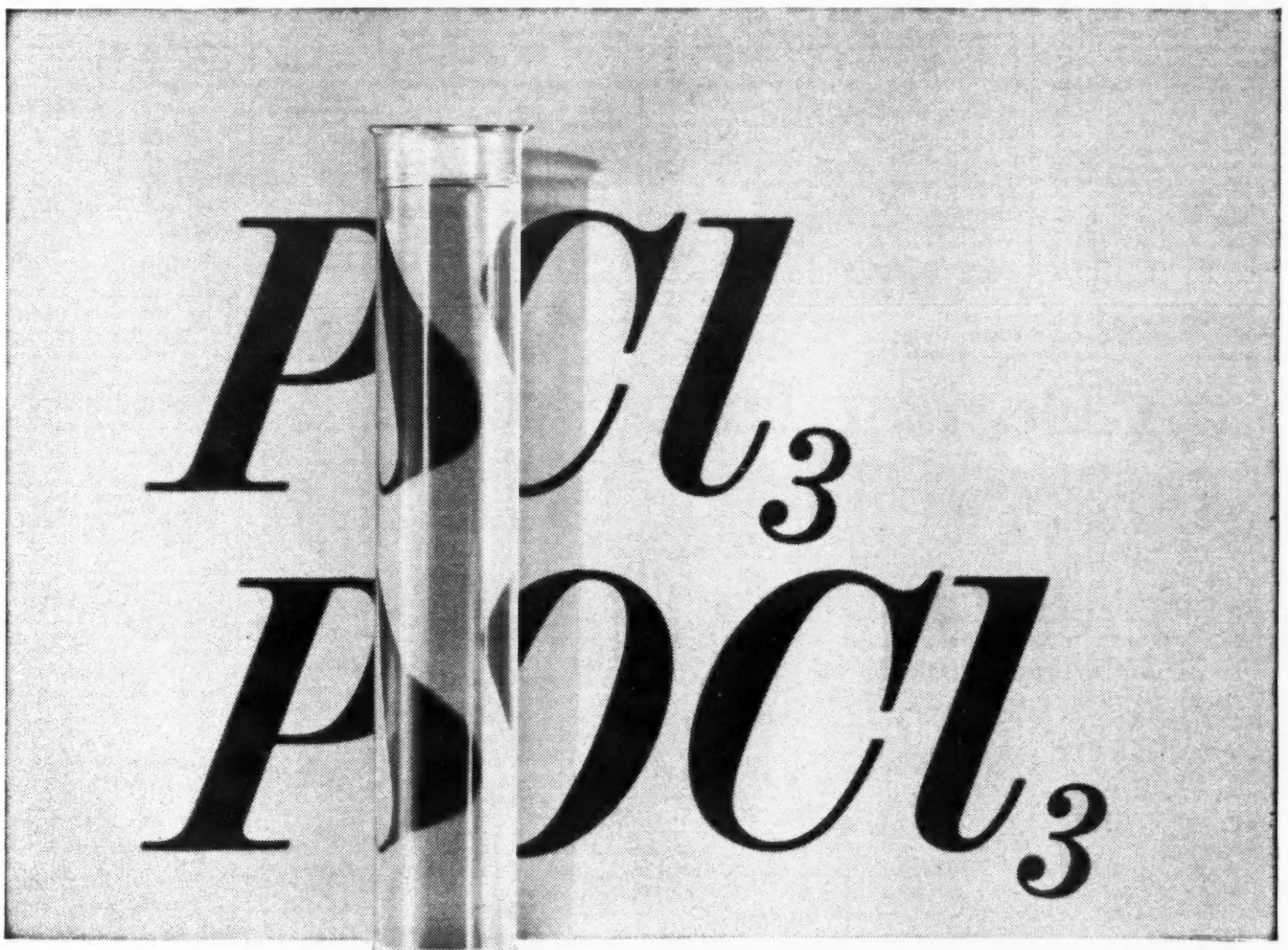
Palmarosa oil, cns. lb 4.90 - 6.00
Papain, powd bots. lb 5.50 - 10.00
Papaverine hydrochloride, nat. or syn. USP cns., 25-oz to 100-oz lots oz 5.00 —
cns., smaller lots oz 5.05 5.20
Papaverine sulfate, nat. or syn. USP, cns oz 7.10 7.35
Paprika, Bulgarian bgs. lb 27 —
Hungarian bgs lb .49 —
Spanish, bgs. lb .30 - —
Yugoslavian, bgs lb .29 .30
Para-aminobenzoic acid (see p-Aminobenzoic acid)
Parachlorobenzoic acid (see p-Chlorobenzoic acid)
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid)
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachlorophenol (see p-Chlorophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline)
Para-anisidin (see p-Ansidine)
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde)
Paracresol (see p-Cresol)
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner red, bbls lb 1.21 —
Chlorinated, kgs lb 1.36 —
Paraffin, crude, scale, white, 123° 127°F, ASTM, tanks refy lb .0655 —
Paraffin, fully refd., 122° 124°F., ASTM, tanks, refy lb .0765 —
125° 127°F ASTM, tanks refy lb .0765 —
130° 132°F, ASTM, tanks refy lb .0765 —
Paraffin, fully refd., 132° 134°F., ASTM, tanks, refy lb .0765 —
135° 137°F ASTM, tanks refy lb .0765 —
AMP temperatures are an arbitrary 3°F higher than ASTM
Paraffin oil, pale, 100-110 vis., at 100°F, tanks east coast refy gal 14 - —
Paraffin wax (see Paraffin)
Paraformaldehyde 91% flake, bgs., c.l. frt alld lb 10 —
bgs, l.c.l. frt alld lb 12 .13
91% powd. bgs, c.l. ex whse lb 1715 —
bgs l.c.l. ex whse lb 1865 —
USP X fib dms, c.l lb 19 —
fib dms, 1,000-lb lots lb 20 —
fib dms, smaller lots lb 21½ —
Paraldehyde tech. 98% 55-gal dms, t.l. dlvd lb 14 —
55-gal dms l.c.l. dlvd lb 15 —
tanks dlvd lb 11½ —
Paranitraniline (see p-Nitroaniline)
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene)
Paranitrophenol (see p-Nitrophenol)
Paraphenetidine (see p-Phenetidine)
Paraphenylenediamine (see p-Phenylenediamine)
Paraphenylphenol (see p-Phenylphenol)
Para-tertiary amylphenol (see p-tert-Amylphenol)
Para-tertiary butylphenol (see p-tert-Butylphenol)
Parathion ethyl dms. frt alld lb 84 —
Parathion prices 2c per lb higher in West
Paratoluenesulfonamide (see p-Toluenesulfonamide)
Passion flower herb, bls lb 5 .40
Patchouli oil imp., cns. lb 5.60 6.50
Peach kernel oil USP (see Apricot kernel oil)
Peacock blue, fugitive 100% color strength, 250-lb bbls., dlvd E of Rockies lb 1.00 —
Peacock blue price 1c higher W of Rockies.
Peanut meal, old process, 45% bgs., f.o.b., mills ton 55.00 - —
solvent, same basis ton 52.00 - —
Peanut oil, crude tanks, t.o.b. mills lb .12½ - —
Refd., dms. lb .17¾ - .18
tanks lb .15¾ - —
Peanut oil, dom. NF citrus, powd. bbls lb 2.05 2.06
Dom. tech. powd., 150 jelly grade bbls lb 1.28 —
Imp. Danish bbls ex whse lb 1.28 —
Pelargonic acid, dms., c.l., dlvd lb .25 —
ton lots, same basis lb .27½ - —
tanks, same basis lb .23½ - —
Penicillin, potassium, cryst., bulk, 1,600,000 units, .019 - —
Penicillin, procaine, cryst., bulk, 1,600,000 units, .021 - —
Pennyroyal oil USP imported, cns. lb 1.95 2.70
Pentachlorophenol, bgs, c.l., t.l., works, frt equald lb 21 —
bgs, l.c.l. same basis lb 22½ .29
Pentachlorophenol in dms 1c higher
Pentaerythritol tech., bgs, c.l., dlvd lb .31 —
bgs, l.c.l., dlvd lb .32 —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust, tanks, Tex refy gal. 14 —
Pentobarbital, dms, 100 lbs. or more lb 6.00 —
Pepper, black, Malabar, bgs lb. .49 - —
Lampong, bgs. lb. .49 - —
Red, Funtuas, bgs. lb. .32 —
Japanese, Hontoka, bgs. lb .37½ - —
Santaka, bgs. lb .31½ - —
Sudanese, bgs. lb .36 —
White, Muntok, bgs lb. .44 - —
Peppermint leaves, dom., USP, bls., dms lb. 70 75
Imp. USP bls lb 85
Peppermint oil, nat., dms. lb. 5.00 5.50
Redist., USP, dms lb 5.50 —
Perchloroethylene, dms, c.l., or t.l., dlvd lb. .13½ —
dms., l.c.l., dlvd. lb. .15¼ —
tanks, dlvd lb. .11¾ - —
tanktruck, 1,000 gal min dlvd lb .12¼ - —
Peri acid, dry bbls., frt alld lb 1.60 —
Paste, bbls frt alld lb 1.55 —
Peru balsam, dms. lb 1.10 1.50
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American, cns., dms lb. 2.40 —
Petrolatum, cream, dms., c.l., refy. lb .08125- —
dms., l.c.l., dlvd. lb. .10-.25- .11375
tanks, refy lb. .05875- —
Extra amber, dms., c.l., refy lb. .07125- .10375
dms., l.c.l., dlvd. lb. .09125- .10375
tanks, refy. lb. .04875- —
Petrolatum, lily white, dms., c.l., refy lb. .08.25- —
dms., l.c.l., dlvd. lb. .10-.25- .12
tanks, refy lb. .06735- —
USP, snow white, dms., c.l., refy. lb. .09125- —
dms., l.c.l., dlvd lb .11125- .125
tanks, refy. lb .09775- —
Petrolatum, USP, soft yellow, dms., c.l., refy lb. .07125- —
dms., l.c.l., dlvd. lb. .095 - .10375
tanks, refy. lb. .04875- —
Petroleum pitch (see Asphalt, petroleum).

PETROLEUM PRODUCTS
Petroleum product quotations are listed individually. For example, prices on Petroleum mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret dms., c.l. works. lb. .16½- .18¾
non-ret dms. l.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55% sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., l.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine dms., c.l., frt. alld. E lb 91 - —
dms., l.c.l. same basis lb 93 - —
p-Phenetidine, dms., c.l., frt. alld. lb 1.05 - —
dms. same basis lb 1.08 - —
Phenobarbitol USP dms., 100-lbs., frt alld lb. 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital)
Phenol, 90-92% (cresol 8-10%), non-ret dms. frt alld E of Rockies lb. .16¾ - —
non-ret dms. l.c.l. same basis. lb. .17¾ - —
tanks, same basis lb. .14¾ - —
82-84% (cresol 16-18%) non-ret. dms., c.l., same basis lb. 16½ - —
non-ret dms. l.c.l., same basis. lb. .17½ - —
tanks, same basis lb. 14½ - —
30°C. or above, tar dist., non-ret. dms., c.l., same basis lb. 18 - —
Phenol, 30°C., or above, tar dist., non-ret dms. l.c.l. same basis. lb .19 - —
tanks, same basis lb. .16 - —
USP, syn. dms., c.l., t.l., frt. alld lb. .18½ - —
dms., same basis lo. 20½ - —
tanks, same basis lb. .16½ - —
Phenolphthalein, USP or yellow, 250-lb dm., 2,000 lbs. frt alld lb 1.30 - —
250-lb dm., same basis lb 1.35 - —
Phenothiazine drench, fib dms., t.l. dlvd lb. .46 - —
fib, dms., ton lots, dlvd lb. .49 - —
NF, fib, dms., t.l., dlvd lb. .45 - —
fib, dms., ton lots, dlvd lb. .48 - —
Phenyl acetate, dms, 100-lb lots, works lb .50 —
Phenyl salicylate (see Salol)
Phenylacetaldehyde, soln., 50% bgs. lb. 2.15 - 2.35
100%, bots. lb. 3.80 - 4.00
Phenylacetic acid, pure, cryst, cns. lb 1.25 1.75
di-Phenylalanine, dms., works lb 27.00 - 37.50
1-Phenyl-3-carbethoxy pyrazolone-5, fib dms. 200-lb lots, dlvd E lb 3.45 - —
fib dms, smaller lots, dlvd E lb 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E lb. .41 - —
dms., l.c.l., dlvd E. lb .42½ - —
tanks, dlvd E lb .38½ - —
m-Phenylenediamine, dms., c.l., t.l., frt. alld lb. 1.08 - —
l.c.l., t.l., same basis lb. 1.10 - —
o-Phenylenediamine, comi. fib. dms. 100 to 1,000 lbs., works. lb. 1.70 1.80
p-Phenylenediamine, tech., dms, works lb 1.55 - —
Phenylethanolamine, dms., c.l., works lb. 75½ - —
dms. l.c.l. same basis lb. 77 —
Phenylethyl acetate, bots. lb. 1.25 1.40
2-Phenylethyl alcohol, extra, dms. lb. 1.14 1.50
Standard, dms lb 1.10 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more, frt alld lb 1.50 —
dms, smaller lots, frt alld lb 1.70 1.85
Phenylethylphenyl acetate, bots lb 4.00 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine 97%, 450-lb dms. lb 1.45 —
1-Phenyl-3-methyl pyrazolone-5 fib. dms., 250-lb lots, dlvd E. lb 1.80 - —
fib dms, smaller lots, dlvd E lb 2.10 - —
o-Phenylphenol, dms, t.c.l. works. lb. .48 .50
p-Phenylphenol, bgs, c.l. works lb. .38½ - —
bgs, l.c.l., works lb. .43 - —
Philippine copal gum, pale, chips, bgs lb. .23¾ .26
nubs, bgs. lb. .33¼ .37
seeds, bgs. lb. .20 Nom.
sorts, bgs. lb. .20 .24
Phloroglucinol, coml., fib dms., works lb 6.40 - —
CP bots., works lb. 17.75 - —
Tech. fib dms works lb. 10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ref cyls works lb 15½ - —
Phosphate defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton. 46.50 - —
Phosphate rock, Florida land pebble run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines, short-ton. 4.989 - 5.398
68-70%, b.p.l., bulk, c.l., same basis short-ton. 5.849 - 5.858
70-72%, b.p.l., bulk, c.l., same basis short-ton. 6.429 - 6.438
74-75%, b.p.l., bulk, c.l., same basis short-ton. 7.329 - 7.338
76-77%, b.p.l., c.l., bulk, same basis short-ton. 8.219 - 8.228
Above Florida prices are based on fuel oil at 2.52 per bbl. and 1 bbl at $1.64.
Phosphoric acid, food grade, 75%, cbys. c.l., works, E., frt. equald 100 lbs. 7.00 - —
cbys. l.c.l. same basis 100 lbs. 7.25 7.75
tanks, t.w., works 100 lbs. 5.60 —
80% cbys. c.l. frt equald 100 lbs. 7.85 —
cbys. l.c.l., works 100 lbs. 8.10 9.35
tanks, t.w., works 100 lbs. 6.00 —
NF 85%, cbys., c.l., works. 100 lbs. 8.50 —
cbys., l.c.l., works 100 lbs. 8.75 9.00
tanks, t.w., works 100 lbs. 6.65 —
Phosphorus, amorpn., red, dms., t.l., works lb. .55 —
dms., smaller lots, works lb. .56 .57
white (yellow), solid, dms., c.l., works, frt equald lb. .20 .20½
dms, l.c.l. works, frt, equald lb. .21½ - —
tanks, works, frt equald, lb. .19 —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works, frt. equald lb. .12½ - —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½ - —
dms. l.c.l., works lb. .14½ - .15½
Solid, dms., c.l., works lb. .11½ - —
dms., l.c.l., works lb. .12½ - .13½
Phosphorus pentoxide, dms., c.l., works lb. .1375- .1475
dms. l.c.l., works lb. .1475- .1675
Phosphorus sesquisulfide, dms., cs., c.l., works lb. .38 —
dms. l.c.l., works lb. .39 .40
Phosphorus trichloride, dms., c.l., works lb. .14 —
dms., l.c.l., works lb. 15 - —
tanks, works lb. 12½ - —
Phthalic anhydride, bgs, c.l. works, frt. equald lb. 19 23
bgs, l.c.l., same basis lb. .20 24
tanks, same basis lb. .18½ - 22½
Phthalimide 97-98%, dms., frt. alld lb. .65 —
Phthalocyanine blue, full strength, bbls, dlvd E of Rockies, lb. 2.90 - —
Resinated, bbls., same basis lb. 2.75 - —
Water dispersable, bbls., same basis lb 1.52 —
Phthalocyanine blue prices 1c. higher W. of Rockies
Phthalocyanine green toner, bbls., works lb 3.35 - —
Resinated, bbls. lb 3.00 - —
Water dispersable, bbls. lb 1.71 —
Phthalocyanine green prices 1c. higher W of Rockies
Phthalylsulfacetamide, fib. dms., 1,000-lb lots or more lb 5.00 - —
NF, fib dms. lb 5.20 - —
a-Picoline dms. c.l., works, frt. equald lb. .46 .48
dms., l.c.l., works, frt. equald lb. .46½ - .49
tanks, same basis lb. .43 .46
b-Picoline 98% dms., t.l., works. lb. 1.05 - —
dms., l.c.l. same basis lb 1.15 - —
tanks, same basis lb. .95 - —
b,g-Picoline 5°C dms., c.l., works. lb. .32½ - —
dms. l.c.l., works lb. .33 - —
g-Picoline, dms., t.o.b., works lb. 1.60 - —
tanks, t.l. same basis lb 1.50 - —
Picric acid, NF bbls. lb. .85 - —
Tech. bbls lb. .44 - —
Pigment green B, kgs. lb. 1.50 - —
Pilocarpine hydrochloride, USP, bots oz. 5.25 - —
Pilocarpine nitrate, USP, bots., vials. oz 5.15 - —
Pimento, Jamaican, bgs. lb. .68½ - —
Mexican, bgs lb. .56 —
Pimento berry oil NF, dms. lb 3.75 9.25
Pimento leaf oil, crude, cns lb. 2.40 2.60
Pine oil, dest.-dist. dms., t.c.l. works lb. .15 —
dms. l.c.l. ex whse New York. lb. .173 - —
Steam-dist. dms. ex whse., New York lb. .185 - —
dms. dlvd lb 188 —
Pineneedle oil, Siberian (see Abies Siberoca oil).
Pink root, bls. lb. 2.25 - —
Piperazine anhyd. dms. c.l., frt alld lb 1.80 - —
dms. l.c.l., same basis lb 1.85 - —
Piperazine citrate 36% dms., 1,000 lbs or more, frt. alld lb. 1.15 - —
Piperazine dihydrochloride, 51%, dms 1,000 lbs or more, frt alld lb .1.23 - —
Piperazine hexahydrate, 44%, dms., 1,000 lbs or more, frt. alld lb. .86 - —
dms, 200-900 lbs., frt. alld lb. .89 - —
Piperazine phosphate, 42%, dms., 1,000 lbs or more, frt. alld lb. 1.06 —
Piperidine, dist, 98% min., dms., c.l. t.l. frt. equald lb 2.55 —
Piperonyl butoxide dms. dlvd. E lb. 4.50 5.05

PITCHES
Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Platinum metal, works oz. 81.00 - 85.00
Pleurisy root, bls. lb. .45 .50
Podophyllum resin, NF, dms. lb. 12.50 —
Poke root, bls. lb. .19 .22
Polymyxin, bots., bulk., 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units. 1,000,000 units. .54 - —
bulk, bots., 1-25 billion units. 1,000,000 units. .56 —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works. lb. .44 - —
dms. smaller lots, works lb. .47 - .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Pontianak copal gum, chips, bgs lb. .25 - —
Nubs, bgs lb. .37 .40
Poppy seed, Argentine, bgs. lb No stocks.
Dutch, bgs. lb. .16 - —
Danish, bgs. lb. .15 - —
Polish, bgs. lb. .16 - —
Turkish, bgs. lb. .12 - —
Potash caustic, liq., 45% basis, dms., c.l., works 100 lbs 4.25 - —
dms., l.c.l., same basis 100 lbs. 5.25 - —
tanks, same basis 100 lbs. 3.70 - —
reg., flake, 88-92%, dms., c.l., same basis 100 lbs. 9.55 - —
reg., flake, 88-92%, dms., l.c.l., same basis 100 lbs. 11.05 - —
solid, 88-92% dms., c.l., works 100 lbs. 9.10 - —
dms. l.c.l., works 100 lbs. 10.60 - —
Potassium acetate, NF, 200-lb. dm., f.o.b. works, E lb. .31 - —
Potassium bicarbonate, USP, gran. dms lb. .22 - —
powd., dms lb. .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs. l.c.l., works lb. .18½ - .19¼
Potassium bichromate in dms. ¾c. higher.
Potassium bitartrate, NF, gran., powd., 100-lb. bgs., c.l., frt. equald lb. .37 —
100-lb bgs. 5,000 lbs., 1 shipt., same basis lb. .38 - —
100-lb bgs. smaller lots, same basis lb. .40 —
Potassium borohydride, powd., dms., works lb. 16.00 - 22.00
Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb lots
Potassium bromate, 200-lb. dms., c.l., frt. alld lb. .49 - —
Potassium bromide, USP, gran., bbls., kgs lb. .39 .40
Potassium carbonate, dom., NF, gran., bbls., dms lb. .20 - —
Dom. tech., powd., bbls., dms lb .21 - .23
Dom., calcinated, bgs., c.l., works, 100 lbs. 8.50 - —
bgs., l.c.l., same basis 100 lbs. 9.55 - —
Dom., hydrated, 83-85%, bgs., c.l., works 100 lbs. 7.10 - —
bgs., l.c.l., works 100 lbs. 8.15 - —
Potassium chlorate, cryst, dms., c.l., works lb. .12¼ - —
dms., l.c.l., works lb. .13½ - .14¼
Powd., dms., c.l., works lb. .12¾ - —
dms., l.c.l., works lb. .14 - .15
works lb. .12¼ - —
Potassium chlorate, NF, cryst., dms., 2,000 lbs or more, works lb. .16¾ - —
NF, gran., 25-lb metal dms lb. .36 —
NF powd., dms., 2,000 lbs. or more, works lb. .17¼ - —
Potassium chloride indust., 99.9% KCL, bulk, c.l., works ton 29.00 - —
bgs., c.l., works ton 30.00 - —
99.3% KCL, bulk, c.l., works ton 28.00 - —
bgs., c.l., works ton 33.00 - —
USP cryst, dms. lb 20 22
USP gran, dms. lb 21 23
USP powd., dms. lb 24 26
Potassium chloride agricultural (see Potassium muriate).
Potassium chromate, tech., dms., works lb. .50 .51
Potassium citrate, NF gran, 250-lb. dms., f.o.b. works E lb. .43 —
powd, 250-lb dms, same basis. lb. .46 - —
Potassium cyanide, dms, 20,000-lb. lots or more works lb 42½ - —
dms, 2,000-19,999 lb lots works. lb. .43 —
dms, smaller lots, works lb .44 .44½
Potassium dichromate (see Potassium bichromate).
Potassium ferricyanide, dms., ton lots, works lb .50 —
dms, smaller lots works lb .65 —
Potassium ferrocyanide, dms., ton lots lb 24½ - —
dms, smaller lots lb 29 - —
Potassium fluoborate fib dms, c.l., works lb .30 —
fib dms., t.c.l., works lb .31 —
Potassium fluoride, dms., works lb. .36 - .37
Potassium gluconate, 100-lb dm., f.o.b works E lb 1.67 —
Potassium guaiacol sulfonate NF dms lb 2.10 2.30
Potassium hydroxide, tech (see Potash caustic).
Potassium hydroxide, USP, pellets, 100-lb dms, 1 to 100-dm lots lb .33½ - .38
Potassium hypophosphite, NF fib dms., 1,000 lb lots lb 1.38 - —
Potassium iodide, USP cryst, gran., dms., 500-lb., f.o.b. works, c. 1.55 - —
Potassium manure salt, min 20% K₂O, bulk, c.l., works, unit-ton .17 - .1768
Potassium metabisulfite, gran, dms., lb .16 - —
Powd., dms lb .27 - —
Potassium muriate, standard, bulk, c.l., works unit-ton. .35 - .37
bagged 60% minimum K_2O, same basis ton 26.00 -27.20
Gran., bulk, c.l., works unit-ton. .36 - .38
bagged, 60% minimum K_2O, same basis ton 26.60 -27.80
Inside prices apply to material contracted for prior to July 1, 1960.
Outside prices apply to material contracted for after that date but also for delivery during the current month
Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs 17.00 —
bbls., smaller lots 100 lbs 18.00 - 19.00
gran., bgs., 20-ton lots 100 lbs 9.50 —
bgs., smaller lots 100 lbs 11.00 12.00
powd., bgs., 20-ton lots 100 lbs 10.50 —
bgs., smaller lots 100 lbs 12.00 - 13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm. f.o.b works E lb .32 - —
Potassium pentaborate, gran. dms., c.l., works ton 219.50 - —
dms., ton lots, ex whse ton 311.00 - —
dms., smaller lots, ex whse ton 316.00 —
Powdered potassium pentaborate $10 per ton higher.
Potassium perchlorate, dms., c.l., works lb. .18½ - —
dms., l.c.l., works lb. .19 - .20
Potassium permanganate, comi., kgs., works lb. .25 - .33
USP, dms., works lb. .29 - .35
Potassium persulfate, dms., c.l., works lb. .17½ - —
dms., l.c.l., works lb. .18 - .21
Potassium pyrophosphate, tetrabasic, dms., works lb. .1475- .1575
Potassium prussiate red (see Potassium ferrocyanide)
Potassium prussiate yellow (see Potassium ferro-cyanide).
Potassium silicate, electrical grade, 30° Be. 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
dms., l.c.l., 5 dm. lots or more, works 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —
Potassium silicate, electrical grade, 40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 5.95 - —
dms., l.c.l., 5 dm. lots or more, works 100 lbs. 6.70 - —
tanks, works 100 lbs. 5.60 - —
Potassium silicate, glass grade, bgs., c.l., works 100 lbs. 17.30 -18.00
bgs., l.c.l., works 100 lbs. 17.80 —
Soln., 29° Be. 1:2.5, dms., c.l., works 100 lbs. 4.95 - —
dms., l.c.l., 5-dm lots or more, works 100 lbs. 5.70 - —
tanks, works 100 lbs. 4.60 - —
Potassium silicofluoride, bgs., works lb. .09½ - .10
Potassium silicofluoride in drums, 0.4c. per lb higher.
Potassium stannate, dms. frt alld, E lb. .789 - .861
Potassium sulfate, min 50% K_2O, agricultural, bulk, c.l., works unit-ton. .67½ - .69¼
Inside price applies to tonnage contracted for prior to July 1, 1960.
Outside price applies to tonnage contracted for after that date but also for delivery during the current month.
Potassium sulfate, NF VII, cryst., dms., lb .31 .33
NF VII, gran., 400-lb. dm lb. .18 - —
NF VII, powd., 400-lb. dm lb. .17 - —
Potassium sulfocyanate, NF cryst., (see Potassium thiocyanate)
Potassium thiocyanate, NF, cryst., dms. works lb. .96 .98
Tech., dms., works lb. .77 .79
Potassium titanate, ctns. c.l. works lb. 16¼ —
ctns. 5-ton lots, works lb. 16½ - —
ctns., 1-ton lots or less, works lb. 16¾ - —



4 REASONS WHY THESE FMC CHEMICALS ARE THE BEST YOU CAN BUY

FMC's experience in handling these hazardous materials is hard to match. You can rely on FMC for safe shipment ...for advice in storing and handling PCl_3 and $POCl_3$.

FMC's research staff will gladly work with you in developing new compounds using these chemicals. If you have an application in mind, take advantage of this service.

FMC is **basic in phosphorus and chlorine:**–Since we start with our own highly-purified elemental materials, you get the benefit of minimum impurities in FMC's phosphorus chlorides.

FMC's strategic location and primary source of raw materials means we can meet all your requirements–on schedule!

Available in any quantity from drums to tank-cars. Write today for technical data.

TYPICAL USES

PCl_3 and $POCl_3$ are excellent chlorinating and condensing agents. They are important intermediates for gasoline additives, plasticizers, dyestuffs. . . .

Phosphorus trichloride is used to make surfactants and reacts with alcohols and phenols to form phosphites.

Phosphorus oxychloride is widely used in the synthesis of organic phosphates, including gasoline additives, plasticizers, and non-burning functional fluids.

Putting Ideas to Work

FOOD MACHINERY AND CHEMICAL CORPORATION
Chemicals and Plastics Division
161 East 42nd Street, New York 17, N. Y.

Potassium-Magnesium Sulfate—Salol

Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk works, base price, ton 13.45 - —
bulk, works, July forward ton 14.00 - —
Potassium-sodium tartrate, NF gran. or powd., 250-lb dms., c.l., works E lb. 42½- —
250-lb dms. 5,000-lb. lots, same basis lb. 43 - —
250-lb dms. same basis lb. 43½- —
Potassium-titanium fluoride, fib. dms., works lb. .39 .40
Potassium-zirconium flouride, fib. dms. c.l., works lb. .50 —
fib dms., t.c.l., works lb. .52½- .55
Pregnenolone bots gram No prices.
Pregnenolone acetate, bots. gram. No prices.
Procaine hydrochloride USP antibiotic grade dms., 2,000-lb lots, frt alld lb 2.25 - —
USP, ampule grade, dms., 1,000-lb. lots, frt. alld lb 2.40 - —
dms. 500 lbs lb 2.45 - —
dms. 100 lbs lb 2.50 - —
Progesterone USP bots ... gram No prices.
Pregnenolone acetate, bots gram No prices.
Propenyl guaethol dms lb. 24.30 27.00
b-Propriolactone, tech., dms., c.l., f.o.b. works lb. .47½- —
dms., l.c.l., t.t.l., same basis lb. .48½- —
tanks, same basis lb. .45 - —
Propionic acid syn. pure, dms., c.l. dlvd lb. .23¼- —
dms., l.c.l., dlvd. lb. .24¾- —
tanks, dlvd. lb. .20¾- —

n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., t.c.l., dlvd lb. .16¼- —
tanks, dlvd. lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd lb. .14 .15
dms., t.c.l., dlvd lb. .15½- .16½
tanks, dlvd. lb. .11½- .12½
n-Propyl gallate, dms., 100 to 2,000-lb lots, works lb. 3.90 4.40
n-Propyl-p-hydroxbenzoate, USP, dms lb. 2.30 2.40
Propyl thiouracil bots., 50 kilo lots or more kilo. 55.00 —
bots., smaller lots kilo. 55.10 55.30
n-Propylamine, dms., c.l., dlvd lb 1.24 —
dms., t.c.l., same basis lb. 1.255 —
n-Propylene dichloride consumers', dms., c.l., dlvd. E lb. .0845- —
dms., t.c.l., same basis lb. .0995- —
tanks same basis lb. .07 —
Propylene dichloride prices in West 1c. higher, same basis
Propylene glycol, indust., dms., c.l., dlvd. E lb. .15 - —
dms., t.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12½- —
USP dms., c.l., dlvd. E lb. .17 - —
dms. t.c.l., same basis lb. .18¾- —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., t.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Propylene oxide dms., c.l., dlvd. E. lb. .17 —
dms., t.c.l., dlvd. E lb. .18½- —
tanks, dlvd. E lb. 14½- —

Psyllium seed, black, bgs. lb. .30 - .35
Blonde, bgs. lb. 18 - .20
Husks, bgs. lb. 42 .45
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03¾- .04¼
bgs., smaller lots lb. .03⅞- —
Imp., Italian, silk-screen, coarse, bgs. ton lots lb. .06½- —
fine, bgs. ton lots lb. .04 - —
sun dried, coarse, bgs ton 60.00 —
fine, bgs. ton 60.00 70.00
Pumpkin seed, bgs lb. .25 .26
Pyrethrins, syn (see Allethrin).
Pyrethrum flowers, fine grd. 0.9% pyrethrins, bgs., ton, works lb. .50 - —
Powd., 1.3% pyrethrins, bgs., ton works lb. .71 - —
Pyrethrum liquid, 20-1 basis (2 grams pyrethrins per 100cc odorless base), dms., works, gal. 9.60 - 9.80
Pyrethrum liquid, 100-1 basis (10 grams pyrethrine per 100cc odorless base), dms., works gal. 45.90 46.90
Pyrethrum oleoresin, dewaxed, 20%, dms., works lb. 11.00 -11.35
purif, 20%, dms., works lb. 11.00 -11.35
Pyridine, denat., dms. c.l. works and frt. equald. gal. 2.77 - —
dms., l.c.l., same basis gal. 2.80 - —
Refd., 2°, non-rel. dms., c.l., same basis lb. .75½- —
dms., l.c.l., same basis lb. .76 - .76½
tanks, same basis lb. .71 - —
Pyridoxine hydrochloride, USP 500-gram bots., dms., f.o.b. works kilo. 95.00 -100.00
Pyrites, Canadian, 48-50% S, mines, long-ton. 4.50 - 5.00
Pyrocatechol (see Catechol).

Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid tech., bbls., 100-lbs., f.o.b., works lb 3.50 - —
Pyrogallol, NF, 100-lb. dms. lb 3.50 - —
Pyroxylin, USP, bots. lb 9.50 - —

Q

Quassia chips lb. .10 - —
Quicksilver (see Mercury metal)
Quince seed, bgs lb. 1.75 - —
Quinidine sulfate, USP, 1,000-oz. dm oz. 74½- —
Quinine, NF, 1,000-oz. dm. oz. .3750- —
Quinine bisulfate USP, 1,000-oz dm. oz. .28 - —
Quinine hydrochloride, 1,000-oz dm oz. .3650- —
Quinine sulfate USP, 1,000-oz dm. oz. .3150- —
Quinoline dms., c.l., frt. equald. lb 50¾ —
dms., l.c.l., same basis lb 51¼- —
tanks, same basis lb .50 —

R

R salt paste, dms., frt alld., 100% basis lb .98 - —
Powd., frt. alld, 100% basis lb 1.08 - —
Rapeseed oil, dms. lb. .15¼- .15½
tanks lb. .13¾- —
Rare earth oxalate, NF, 45-50%, bgs, works lb 1.15 —
Rauwolfia serpentina root, powd., bbls., dms lb 1.00 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid).

RED PIGMENTS
Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

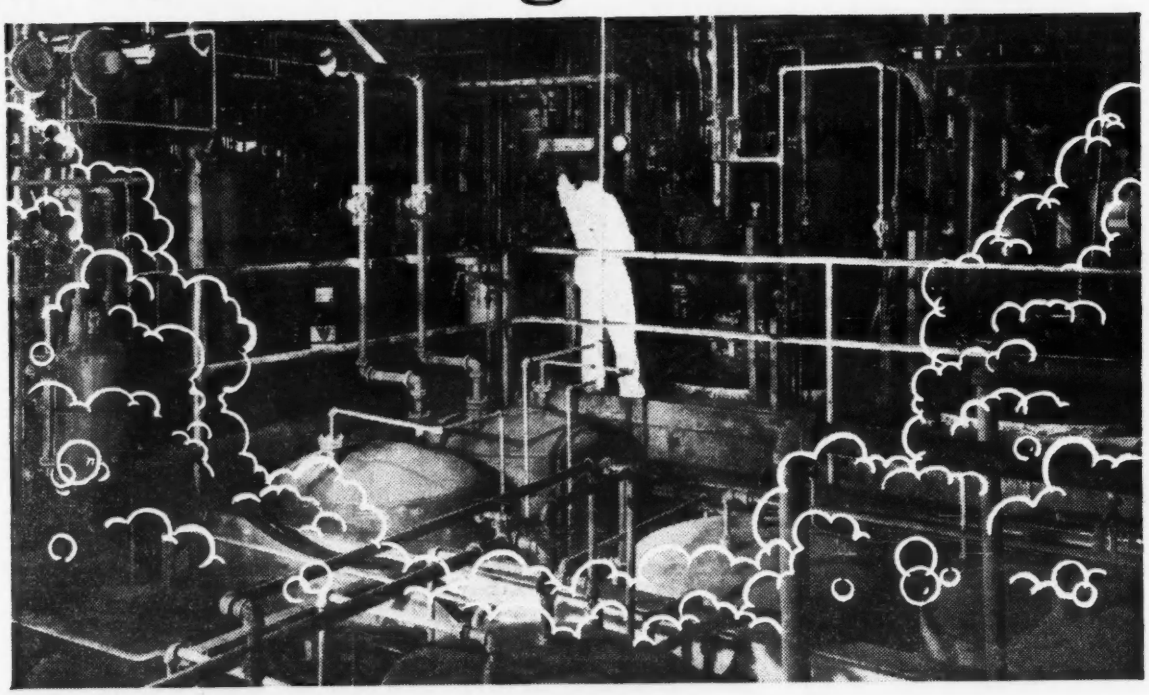
Red precipitate (see Mercuric oxide, red).
Red toner, Lake C, alizanine, bbls., works lb. 1.25 - —
Reserpine, cryst. bots gram 1.25 - —
Resorcinol, tech. grade, bgs., c.l., works, frt. equald lb. 77½- —
bgs., t.c.l., same basis lb. 78½- —
Resorcinol in dms., 1c per lb. more.
USP, powd., dms., works lb 2.95 - —
Resorcinol monoacetate, NF dms. lb 2.50 - —
Rhatany root, bgs lb .14 .16
Rhodamine red toner, molybdated, PMA, kgs., works lb 6.00 —
Tungstated, PTMA works, kgs lb 6.60 —
Rhodinol, 5-lb. cans lb. 42.00 -51.00
Synthetic lb. 14.00 16.00
Rhubarb root, India, whole, bgs lb .25 —
powd., bgs lb .35 —
tanks, same basis lb 14½- —
Riboflavin, USP fib dms., kilo or more, dlvd kilo. 36.00 - —
Riboflavin, 5-phosphate-sodium fib dms, kilo or more, dlvd kilo 104.50 - —
Rice bran oil, clarified, dms., t.c.l. lb. .14 14⅛
tanks, dlvd. E lb. .12 Nom.
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium-sodium tartrate).
Roofing pitch (see Coaltar pitch roofing).
Rose oil, nat., Bulgarian, bots lb 1,152.00- —
Turkish, bots lb 560.00 750.00
Rosemary oil, Spanish, NF, cns., dms lb .97 1.40
Spanish, tech., cns., dms lb .50 1.20
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib, dms., works unit-lb. .10½- —
Resin, 25-45% fib dms., works, unit-lb. .10½- —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 —
Rue oil, bots lb 2.75 3.00
Rutin, NF fib dms., 10 kilo lots kilo. 13.00 - —
fib dms., 5 kilo lots kilo. 13.50 - —
fib dms., 1 kilo kilo. 14.00 - —
Ryania, 100%, powd., bgs., c.l., works lb .22 - —
bgs., t.c.l., same basis lb .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime bbls lb. .42 .44
Saccharin, calcium, fib dms., 1,000-lb lots, works lb. 2.50 - —
USP, gran., soluble, dms., 1,000-lb lots lb 1.40 - —
dms., smaller lots lb 1.50 - —
USP, powd., soluble, insoluble, dms., 1,000-lb lots lb 1.45 - —
dms., smaller lots lb. 1.55 - —
Saccharin, USP, powd., insoluble, dms., 1,000-lb lots lb 1.43 - —
dms., smaller lots lb. 1.53 —
Safflower oil, dms., New York lb. .1725- .1750
tanks, Atl. Coast lb .15¼- 15⅛
Saffron, Mancha Superior, tins lb. 19.50 - —
Safrol, dms. lb. .65 - —
Sage, Dalmatian, bgs. lb. .40 - —
Greek, cns. lb .15 - —
Italian, cns. lb .18 —
Sage oil, clary, bots. lb. 15.50 -18.00
Dalmatian, cns. lb 2.85 3.25
Spanish, cns. lb 1.25 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b., plant, frt. equald lb 1.23 - —
dms., t.c.l., same basis lb 1.25 - —
Salicylamide, 100-lb dms lb 1.05 - —
Salicylic acid, tech., fib dms., c.l., t.l., dlvd lb. .40½- —
fib dms., t.c.l., dlvd lb. .44¾- —
Salicylic acid, USP, cryst. 200-lb. fib. dms., 1,000 lbs or more lb. .51¾- —
200-lb. fib. dms., less than 1,000 lbs lb. .54¾- —
100-lb. fib. dms., 1,000 lbs or more lb. .53¾- —
100-lb. fib. dms., less than 1,000 lbs lb. .56¾- —
USP, powd., 100-lb fib dms., 1,000 lbs. or more lb. .58¾- —
100-lb. fib. dms., less than 1,000 lbs lb. .61¾- —
Salol, NF, gran., bbls., kgs lb 1.20 —
Powdered salol, 25c. per lb. higher.

SILICONE NEWS from Dow Corning

Foam Eating Into Profits?



Job-proved Dow Corning Defoamers Speed Processing, Raise Capacity

Ever try to blow up a balloon with a hole in it? Hard to get it up to any size, isn't it. The same's true of foamers . . . with Dow Corning Silicones added. Silicones put holes in bubbles . . . keep systems foam-free! They're perfect foam controllers: reliable, economical, safe, easy to use . . . quickly available from Dow Corning warehouses conveniently located to expedite shipment to you.

No Hold-Ups. No Foam-Overs. Production slow-downs caused by foam are eliminated when fast-working Dow Corning Silicones are added to systems. The absence of foam permits you to make more efficient use of equipment, step up production and meet schedules never before thought possible. Capacity is increased, and foam-overs are prevented . . . thereby cutting cost of clean-up and maintenance and helping reduce fire hazards.

Eliminate foam-overs here.

What's Your Foamer? Today, Dow Corning Silicones are used both as antifoamers and as defoamers in processing chemicals, petroleum products, asphalt, textiles, paper, paints, adhesives . . . in metalworking and laboratory work . . . in virtually every industry and process — even in food processing where the use of Dow Corning Silicones at designated levels is sanctioned by FDA.

If you're troubled with foam slowing down your plant operation, taking up productive capacity, or creating maintenance, it'll pay you to test Dow Corning Silicones.

New Literature and Free Sample. A new 8-page manual, "The ABC's of Defoaming", will help you learn all the facts about Dow Corning silicone defoamers . . . how and where to use them, examples of the small quantities of silicones needed to control foam, and typical successful applications. Write today for your FREE copy and ask for a generous FREE SAMPLE of the silicone defoamer that you can test . . . that will likely give you the most efficient, most economical defoaming action. Indicate your type of foamer: aqueous, oil, food or other. Address Dept. 6312.

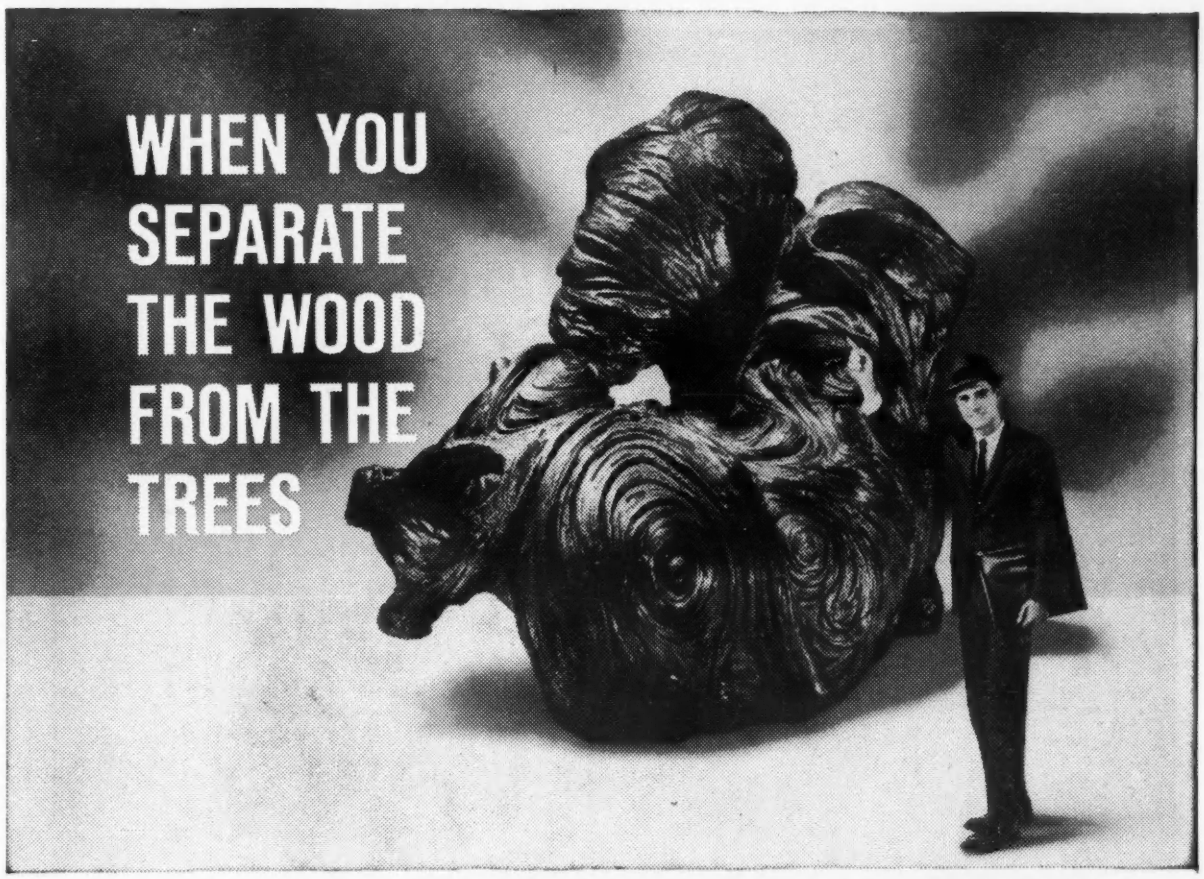
Investigate other time-saving silicones... the nearest Dow Corning office is your No. 1 source for complete information and technical service.

first in silicones

Dow Corning CORPORATION
MIDLAND, MICHIGAN

ATLANTA BOSTON CHICAGO CLEVELAND DALLAS LOS ANGELES NEW YORK WASHINGTON, D. C.

Salt, rock, paper bgs., c.l.	100 lbs.	1.00	—
Salt, table vacuum, common, fine, paper bgs., c.l.	100 lbs.	1.34	—
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis	ton.	28.00	—
Saltpeter (see Potassium nitrate).			
Sandalwood, E. Indian, chips, bgs.,	lb.	.55	.66
powd, fib, dms	lb.	.75	.76
Sandalwood oil, ens	lb.	21.00	—
Sarcosine, tech., tanks, f.o.b., works, frt. equald	lb.	1.03	—
	lb.	No stocks.	
Sassafras oil, artif., dms	lb.	.45	—
Nat., dom., dms	lb.	1.40	—
Savory oil, cns	lb.	4.75	—
Schaeffer's salt paste, dms., frt. alld. 100% basis	lb.	.85	—
Powd. bgs. frt. alld., 100% basis.	lb.	.95	—
Scopolamine hydrobromide, USP,	bots. oz.	13.00	—
Sebacic acid, CP bgs., c.l., works.	lb.	.69½	—
bgs., l.c.l., works	lb.	71½	—
Purified, bgs. c.l., works	lb.	.65½	—
bgs., l.c.l., works	lb.	.67½	—
Seidlitz mixture fib dms., 5,000-lb. lots	lb.	.30½	—
fib dms., smaller lots	lb.	.31	.32
Selenium, powd., 99½%, dms., dlvd.	lb.	7.00	—
Senega root, bls	lb.	3.00	—
Senna leaves, Alexandria, whole and half, bls.	lb.	.20	.22
siftings	lb.	.16	—
Tinnevelly, No. 1, bls	lb.	.22	—
No. 2, bls	lb.	.18	—
No. 3, bls	lb.	.14	—
pods, bls.	lb.	.28	—
powd., bbls., bxs	lb.	.17	—
Serpentaria root, bls	lb.	6.50	—
Sesame oil USP, dms	lb.	.38	.39
Sesame seed Colombian, bgs	lb.	.15½	—
Lebanese hulled, bgs	lb.	19	—
Nicaraguan, hulled, bgs.	lb.	.25	—
nat., bgs	lb.	.14	—
Salvadorian, Nat. bgs	lb.	.16	—
Shellac, bleached bonedry bgs., 1,500-lb. lots	lb.	.47	—
dms., t.c.l. works	lb	.22	.30½
bbls., 1,500-lb. lots	lb.	.46	—
kgs., 1,500-lb. lots	lb.	.47	—
Bonedry shellacs prices for less than 1,500-lb lots 1c. per lb. higher for all packages.			
Shellac bleached, refd. bgs., 1,500-lb. lots	lb.	.56	—
bbls., 1,500-lb lots	lb.	.57	—
kgs., 1,500-lb lots	lb.	.58	—
Shellac orange lemon No. 1, bgs., 10-bg. lots	lb.	.37	.39
lemon No. 2, bgs., 10-bg. lots.	lb.	.34	.37
superfine, bgs. 10-bg. lots	lb.	.32	.34
Shellac in 1 to 10-bg. lots 1c. per lb. more.			
Shingle stain oil, tar distillate, dms., c.l., works	gal.	.37	—
dms., t.c.l., works	gal.	.48	—
tanks, works	gal.	.25	—
Sienna pigment, burnt, paper bgs., c.l., works	lb.	.06½	.18½
paper bgs., t.c.l., works	lb.	.06¾	.17¾
Raw, paper bgs., c.l., works	lb.	.06¾	.16¾
paper bgs., l.c.l., works	lb.	.07	.17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works	ton.	25.00	—
bgs. l.c.l. works, ex whse.	ton.	45.00	55.00
Silica, sand-quartz, 99½%, 325 mesh, bgs., c.l., works	ton.	20.00	—
bgs., l.c.l., works	ton.	25.00	—
99½%, 140 mesh, bgs., c.l., works	ton.	15.00	—
bgs., t.c.l. works	ton.	20.00	—
Silicon tetrachloride, tech., dms., c.l., works	lb.	.20	—
tanks, works	lb.	.15	—
Silver bullion, ingots, cs	Troy oz.	.91⅛	—
Silver cyanide, bots., 1,000-oz. lots,	oz.	.94¾	—
bots., 500-oz. lots	oz.	.95¼	—
bots., 100-oz lots	oz.	.96¼	—
Silver nitrate, CP, cryst., bots., 1,000 to 4,000 oz., f.o.b. works	oz.	.67¼	—
bots. 250-500 oz., same basis.	oz.	67¾	—
USP granular silver nitrate 4c. per oz. higher.			
Silver proteinate, mild, USP, 16-oz.	bots. oz.	1.46	—
Snakeroot oil, Canada, cns	lb.	40.00	43.00
Soapbark, crushed, bls	lb.	.30	.35
Powd., bls	lb.	.35	.40
Whole, bls	lb.	.20	.25
Soda ash, dense, 58%, paper bgs., c.l., works	100 lbs.	1.90	—
paper bgs., l.c.l., stock pts.,	100 lbs.	3.00	4.77
bulk, c.l., works	100 lbs.	1.60	—
Light, 58%, paper bgs., c.l., works	100 lbs.	1.85	—
paper bgs., t.c.l., stock pts.	100 lbs.	3.95	4.73
bulk, c.l., works	100 lbs.	1.55	—
Soda, caustic, flake, 76%, dms., c.l., works, frt equald	100 lbs.	5.20	—
liq., 50% sellers' tanks, works, dry basis	100 lbs.	2.90	—
50%, rayon type, sellers' tanks, works, dry basis	100 lbs.	2.90	3.00
Soda, caustic, liq, 73%, sellers' tanks works, dry basis,	100 lbs.	3.00	—
liq., 73% rayon type, sellers' tanks, works, dry basis	lb.	3.00	3.10
solid, 76% dms., c.l., works,	100 lbs.	4.80	—
Soda, sal, conc., bgs., c.l., works.	100 lbs.	2.50	—
bgs., smaller lots, works	100 lbs.	2.80	—
Sodium acetate anhyd., bgs., c.l., dlvd. E	lb.	.14½	—
NF, 60%, gran., dms., c.l., works,	lb.	.15½	—
dms., t.c.l., works	lb.	.17½	—
Sodium alginate, NF, white powd., dom. 300 lbs. or more	lb.	1.02	—
Sodium p-aminosalicylate, dms., 100-lb lots or more, frt. adjusted	lb.	1.90	—
Sodium antimoniate bgs., c.l., dlvd. E	lb.	.27½	—
bgs. t.c.l. dlvd E	lb.	.29	—
Sodium arsenate 60% arsenic pentoxide, 200 lb. dm., less than ton lots, f.o.b. works	lb.	.24	—
ton lots or more, same basis.	lb.	.23½	—
Sodium arsenite, 94% soluble pink powder, 75% arsenious oxide, dealers, 100-lb. dms., ton lots or more, f.o.b., works	lb.	.18½	—
1,600-1,900 dms., same basis	lb.	.19	—
100-500 dms., same basis	lb.	.20	—
Sodium ascorbate, dms., 100-kilos., dms., f.o.b. works	kilo.	6.80	—
less than 100-kilos	kilo.	7.05	—
Sodium benzoate, tech., dms., c.l., t.l., frt. alld	lb.	.35	—
dms., t.c.l. same basis	lb.	.39	—
USP dms., c.l., t.l., frt. alld	lb.	.38	—
dms., ton lots, same basis	lb.	.43	—
dms., 1,000-lb lots, same basis.	lb.	.45	—
Sodium bicarbonate, USP, gran., bgs., c.l. works	100 lbs	2.95	—
bgs., l.c.l. works	100 lbs	3.85	—
USP, powd., bgs., c.l., works.	100 lbs	2.55	—
bgs., t.c.l., works	100 lbs	3.45	—
Sodium bichromate, gran., bgs., c.l., t.l., works	lb.	.13	—
bgs., l.c.l., works	lb.	.13½	.14¼
Sodium bichromate in dms. ¼c. per lb. higher.			
Sodium bifluoride, bbls., c.l., works, frt. equald	lb.	.19½	—
bbls., l.c.l., same basis	lb.	.2025	—
Sodium bisulfate, bulk, c.l., works,	100 lbs.	2.00	—
dms., c.l., frt. equald	100 lbs.	3.00	3.60
dms., l.c.l., frt. equald	100 lbs.	3.50	4.10
Sodium bisulfite, anhyd., bgs., c.l., works	100 lbs.	5.00	—
bgs., l.c.l., works	100 lbs.	5.45	—
Soln., 35° bbls., c.l., works	100 lbs.	1.70	—
bbls., l.c.l., works	100 lbs.	2.20	—
Sodium borate (see Borax)			
Sodium borohydride, powd., dms., c.l., works	lb.	19.90	—
dms., l.c.l., works	lb.	33.00	40.00
Sodium borohydride, stabilized water soln., 12% $NaBH_4$ 100% basis, dms. works	lb.	15.00	—
Pelletized sodium borohydride $1 per lb. higher in 1,000-lb lots.			
Sodium bromide, USP, gran, dms., works	lb.	.40	—
Sodium carbonate, cryst., monohydrated (see Soda, sal).			
Sodium carbonate, monohydrated, bgs., c.l., works	100 lbs.	3.10	—
bgs., l.c.l., works	100 lbs.	3.50	—
Sodium carboxymethyl cellulose (see CMC).			
Sodium chlorate, cryst., 350-lb. dms., c.l., works	lb.	.09	—
dms., l.c.l., works	lb.	.09½	.10½
Sodium chlorate in 100-lb. dms., only, ¼c. per lb. higher.			
Sodium chloride, tech. (see Salt).			
Sodium chloride, USP, gran., bgs.	lb.	.03	—
Sodium chlorite, tech., dms., c.l., works	lb.	.58	—
dms., 20-dm. lots or more, works	lb.	.66	—
dms., smaller lots, works	lb.	.70	.73
Sodium chloroacetate, tech., dms., c.l., works	lb.	.27	—
dms., l.c.l., works	lb.	.28	—
Sodium chromate, anhyd., fib. dms., c.l., t.l., works	lb.	.14¾	—
fib. dms., l.c.l., works	lb.	.15¼	.16½
Sodium chromate tetrahydrate, bgs., c.l., t.l., works	lb.	.1015	—
bgs., l.c.l.	lb.	.1065	.1190
Sodium citrate, anhyd., 200-lb. dm., f.o.b. works E	lb.	.62	—
NF VIII, gran, bgs., c.l., same basis	lb.	.26	—
USP XIV, gran., bgs., c.l., same basis	lb.	.29	—
Sodium citrate, USP, powd. prices ½c. higher.			
Sodium cyanate, dms., 1,000-lb. lots, works	lb.	.85	—
dms., smaller lots, works	lb.	.90	1.10
Sodium cyanide, briquettes or gran., 97 percent min., dms., works, 20,000-lb. lots	lb.	.176	—
dms., same basis, 5,000 to 19,999-lb lots	lb.	.188	—
dms., same basis, 1,000 to 4,900-lb. lots	lb.	.198	—
Sodium cyclamate, 100-lb. dm., f.o.b. works	lb.	1.95	—
Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works	lb.	.18	—
250-lb dms. t.c.l., works	lb.	18¾	—
Tech., 33-35% acetic acid, dms., l.c.l., works	lb.	.15	—
250-lb. dms., l.c.l., works	lb.	15¾	—
Sodium dimethyl dithiocarbamate, 40% soln., dms. c.l., t.l. frt. alld., 100% basis	lb.	42	—
dms., l.c.l., t.t.l., same basis	lb.	47	52
tanks, same basis	lb.	38	—
Sodium ferrocyanide, bgs., 10-ton lots	lb.	.13½	—
bgs. smaller lots	lb.	.14¼	—
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald	lb.	.1390	—
fib. dms., l.c.l., works, frt. equald	lb.	.1465	—
Sodium formate, bgs., c.l., works.	100 lbs.	7.05	—
bgs., l.c.l., ex whse	100 lbs	8.65	—
Sodium gentisate, 100-lb. fib. dms.	lb	5.50	—
Sodium gluconate, refd., 250-lb. dm., f.o.b works E	lb	.84	—
Tech., bgs. c.l., t.l., same basis	lb.	.34	—
Sodium hydride, 50% soln. in oil, dms., works	lb.	1.25	2.50
25% soln. in oil, dms., 50 lbs. or less, f.o.b. shipping point.	lb.	2.20	—
dms., 50-99 lbs., same oasis	lb.	1.77	—
dms., 100-999 lbs., same basis	lb	1.20	—
dms., 1,000 lbs or more, same basis	lb	.95	—
Sodium hydrosulfide (see Sodium sulfhydrate).			



there's a unique chemical here ... NEWPORT PINE OIL

Maybe you think of Pine Oil today as a Detergent or Disinfectant. Because of its wide use in these fields, your conclusion is factual, *but has this overshadowed the fact that Pine Oil is a much more versatile chemical?*

Look at its general physical and chemical properties here and you'll discover – we hope to your surprise – why NEWPORT Pine Oils are also used as: *Mining Frothing Agents, Textile Wetting Agents, Pigment Grinding Aids, Gelatin Retarders* and *Flow Viscosity Improvers.*

Its uses are not limited to one field, but include soaps and cleaners, paints and varnishes, cutting oils, metal chrome polishes, essential oils, ore flotation, pharmaceuticals and leather processing.

Pine Oil, obtained from wood stumps, is completely oil soluble. On emulsification, it is also completely water miscible. It is outstanding **in reducing surface tension** and is an excellent solvent. It is non-toxic under normal conditions and, last but not least, don't forget its fragrant quality where odor masking is necessary!

GENERAL PHYSICAL AND CHEMICAL DATA OF TYPICAL NEWPORT PINE OIL

	Weight Per Gallon @ 15.5° C. (lbs.)	Specific Gravity @ 15.5° C./15.5° C.	Refractive Index @ 20° C.	Engler Distillation °C. 5%	50%	95%	Flash Point °F. (open cup)	Kauri Butanol Value*	Polymerization Residue
G.N.S. No. 5	7.76	0.932	1.482	200	212	220	167	Inf.	0.5%

*Basis: Toluene = 105

NEWPORT INDUSTRIES DIVISION
HEYDEN NEWPORT CHEMICAL CORPORATION 342 Madison Avenue, New York 17, New York

Mail this coupon today for free, detailed information . . .

Gentlemen: Please send me Booklet No. 4 detailing information on Newport Pine Oils.

NAME_____
COMPANY_____
ADDRESS_____
CITY_____ STATE_____
TITLE_____

Sodium Hydrosulfite—Sodium Trisilicate

Sodium hydrosulfite dms c.l., frt alld lb 23½ —
dms. l.c.l. frt alld. lb 25¾ —
Sodium hydroxide NF, pellets, 100-lb dms. 1 to 100-dm lots lb .23½ .25
Sodium hydroxide, tech (see Soda, caustic).
Sodium hypophosphite NF dms 1,000-lb lots lb .99 —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP 300-lb dms. f.o.b. works lb. 2.13 - —
Sodium lauryl sulfate, dms. c.l. divd lb 20½- —
dms. l.c.l., divd. lb 21½ —
tanks, divd lb 19½- —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs 4.25 6.50
l.c.l., bgs., works 100 lbs 4.40 7.00
Sodium metahisulfite (see Sodium bisulfite).
Sodium metaborate octahydrate, gran., bgs., c.l., works ton 210.00 - —
bgs., ton lots, ex whse 100 lbs 8.00 - —
bgs., smaller lots, ex whse 100 lbs 9.25 -11.25
Tetrahydrate, bgs., c.l., works ton 210.00 —
bgs., ton lots, ex whse 100 lbs. 13.93 —
bgs., smaller lots, ex whse 100 lbs. 15.18 -17.18
Sodium metallic, bricks, c.l., works, lb .21 —
Fused, 18,000-lb lots or more, works lb. .19½- —
tanks, works lb. .17 - —

Sodium metalinate, bbls., frt. alld, lb. .62 - —
Sodium metaphosphate, bgs., c.l., f.o.b shipping pt 100 lbs. 11.10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 - —
dms., c.l., same basis 100 lbs. 11.70 - —
dms., l.c.l. same basis 100 lbs. 12.45 - —
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs 5.70 - —
bgs., 6,000-19,900 lb. lots, works, 100 lbs 6.05 - —
dms., c.l., works 100 lbs 6.20 - —
dms., l.c.l., works 100 lbs 6.55 - —
Sodium metasilicate pentahydrate, bgs., c.l., works 100 lbs 4.45 —
bgs., l.c.l., works 100 lbs 4.80 6.75
dms., l.c.l., works 100 lbs 4.95 —
dms., l.c.l., works 100 lbs 5.30 7.25
Sodium molybdate anhyd., dms., works, frt equald lb. .92 .99
Cryst., dms. works frt alld lb. .74 .76
Sodium monoglutamate (see Monosodium glutamate)
Sodium mononydrate (see Sodium carbonate monohydrated)
Sodium naphthionate, bbls. lb. .73 - —
Sodium nitrate, dom., crude, bgs., c.l. works ton 48.00 - —
bulk, c.l., works ton 44.00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton 48.00 - —
bulk, c.l., same basis ton 44.00 - —
Sodium nitrite, USP, bbls., c.l., works, frt equald 100 lbs 9.00 - —
bbls., l.c.l., same basis 100 lbs. 11.00 - —

Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms., l.c.l., works 100 lbs. 7.05 - 7.65
Hydrated, flake, bbls., c.l., works, 100 lbs. 5.65 - —
bbls., l.c.l., works 100 lbs. 7.60 - 7.90
Sodium oxalate, 98%, bgs., works, 100 lbs. 12.35 - —
99%, bgs., works 100 lbs. 15.40 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate)
Sodium para aminosalicylate (see Sodium p-aminosalicylate)
Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equald lb. .26 - —
dms., l.c.l., same basis lb. .27½- .34
Pellets, dms., c.l., same basis lb. .26 - —
dms., l.c.l. same basis lb. .27½- .34
Powd., dms., c.l., same basis lb. .25 - —
dms., l.c.l., same basis lb. .26½- .33
Sodium pentaharbital, USP, dms., 100 lbs. or more lb. 6.00 - —
Sodium perborate NF, tech., bgs., c.l., works lb. .18½- —
bgs. l.c.l., works lb. .19 - .21
Sodium peroxide, dms., c.l., t.l., dlvd E of Miss lb. .21½- —
dms., l.c.l., same basis lb. .22 - .22½
Sodium phenoharbital USP, 100-lb. dms lb. 3.75 - —
Sodium phenosulfonate, USP, IX, gran., dms lb. .52 - .53
NF powd. dms lb. .55 - .56
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt equald 100 lbs. 7.95 - —
bgs. l.c.l. same basis 100 lbs. 8.35 - 9.40
Sodium phosphate, dibasic, cryst., bgs., c.l., t.l., frt. equald, 100 lbs. 4.60 - —
bgs. l.c.l., frt equald 100 lbs. 5.00 - 5.75
Dibasic, duohydrate, bgs., c.l., frt. equald 100 lbs. 7.60 - —
bgs., l.c.l., same basis 100 lbs. 8.10 - —

Sodium phosphate, USP, dried, powd., bgs., dms., works lb. .19 - .20½
Monobasic, anhyd., bgs., c.l., frt. equald 100 lbs 9.00 - —
bgs., l.c.l., same basis 100 lbs. 9.40 -10.00
Tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.00 - —
bgs., l.c.l., frt. equald 100 lbs. 9.45 -10.00
Sodium phosphate in dms. 60c. to 80c. higher than bgs.
Sodium picramate, tech., paste, dms., f.o.b. works, frt. equald lb. .90 - —
Sodium proplonate, any quantity, dms., dlvd. E. of Rockies. lb. .34½- —
Prices W of Rockies 3c. per lb. more.
Sodium prussiate, yellow (see Sodium ferrocyanide)
Sodium pyrophosphate acid, bgs., c.l., works, frt. equald. 100 lbs. 11.10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 12.35
Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .36 - —
dms. l.c.l. works lb. .37 - .39
Tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.55 - —
bgs., l.c.l., same basis 100 lbs. 8.30 - —
Sodium salicylate USP, dms., 1,000-lbs or more lb. .78½- —
dms., less than 1,000 lbs. dms. lb. .81½- —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 - —
Sodium sesquicarbonate, bgs., l.c.l., dlvd. zone 1 100 lbs. 4.10 4.35
dlvd. zone 2 100 lbs 4.35 4.60
dlvd. zone 3 100 lbs 4.75 4.90
dlvd zone 4 100 lbs 5.35 5.60

Sales zones are (1) Atl. states E. of Miss., R and N of south bound of Ky. and Va., Ala., La. and Miss. south of 31°; Tex E. of 100°; S of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark E. of 98° Ga.; Iowa (except Davenport) Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No of 31°; (3) Ark. W. of 96°, Kan., Neb W. of 98° N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.

Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works 100 lbs. 5.70 - —
dms., c.l., t.l., works 100 lbs 6.20 - —
Sodium sesquisilicate hydrated, bgs., c.l., works 100 lbs 5.00 - —
bgs., 6,000-19,900 lb. lots, works 100 lbs. 5.35 - —
dms., c.l., works 100 lbs 5.50 - —
dms. 6,000-19,900 lb lots, works, 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be., 1:3.2, turbid, dms., c.l., works, 100 lbs. 1.65 - —
dms., l.c.l., works 100 lbs 1.90 2.40
tanks, works 100 lbs. 1.20 —
47° Be. 1:29.9, turbid, dms., c.l., works 100 lbs. 2.25 —
dms., l.c.l., works 100 lbs. 2.60 - 3.45
tanks, works 100 lbs. 1.90 - —
52° Be. 1:2.4, turbid, dms., c.l., works 100 lbs. 2.65 - —
dms., l.c.l., works 100 lbs 3.00 - 3.50
tanks, works 100 lbs. 2.30 - —
Solid, 1.3.2, bgs., works ton 67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., l.c.l., works lb. .725- —
Sodium silicofluoride in dms., 0.4c. per lb. higher
Sodium stannate, dms., works, frt. alld., E. lb. .648 - .707
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 - —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd., bgs., c.l., dlvd E. ton 54.00 - —
Tech., detergent, rayon grade, bgs., c.l., works ton 36.00 - —
bulk, c.l., works ton 32.00 - —
USP, cryst., fib dms. lb. .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald lb. .07¼- —
dms., l.c.l., same basis lb. .08¼- —
Liq., 40-44%, tanks, works, 100% basis ton 130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 - —
dms., l.c.l., same basis lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald lb. .05½- —
bbls., l.c.l., same basis lb. .06½- —
Sodium sulfite, anhyd., powd., bgs., c.l., works 100 lbs. 7.55 - —
bgs., l.c.l., same basis 100 lbs. 7.95 - —
Anhyd., tech., bgs., c.l., works, 100 lbs. 3.50 - —
bgs., t.l., same basis 100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq., 40%, dms., c.l., works, frt. equald lb. .04½- —
dms., l.c.l., same basis lb. .05½- —
Sodium thiocyanate, CP, dms. lb. .55 - .65
Tech., anhyd., dms., 1 ton lots or more, works lb. .367 - —
dms., less than ton lots, works lb. .387 - —
Sodium thiosulfate, NF, cryst., bbls. lb. .13½- —
Tech., anhyd., 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 7.75 - —
100-lb. bgs., l.c.l., t.t.l., frt. equald 100 lbs. 8.15 - —
Sodium thiosulfate, tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt. equald lb. .0775- —
64-lb. bgs., l.c.l., t.t.l., frt. equald lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
Sodium thiosulfate, tech., pentahydrate, photo grade, 100-lb. bgs., l.c.l., t.t.l., frt. equald 100 lbs. 5.20 - —
Sodium titanate, ctns., c.l., works, lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton lots or less, works lb. .14¾- —
Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E. lb. .35 - —
50-lb. dms., c.l., frt. alld. E lb. .35½- —
10-lb cns., c.l., frt. alld E lb. .42 —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.90 - —
bgs., l.c.l., same basis 100 lbs. 8.65 - —
Sodium trisilicate, powd., 1:3.2, bgs. c.l., works 100 lbs 8.95 —
bgs., l.c.l., works 100 lbs 9.70 -13.15
dms., c.l., works 100 lbs 9.45 —
dms., l.c.l., works 100 lbs. 10.20 -10.60

My name's Nosey. I'm the Esso Solvents Expert. And I'm illustrating the fact that Varsol's odor is *down* and its quality *up*.

As you know, odor is hard to control without sacrificing solvent power. That's why Esso has been researching low odor for years. Fact is, we have an Odor Panel composed of experts in all of our refinery and research establishments. These people are dedicated to the continuing improvement of "low odor" Esso Solvents.

Constant research makes it possible to deliver our solvents fresh and uncontaminated from modern, conveniently located terminals. For further information, contact your nearest Esso office or write: Esso Standard, Division of Humble Oil & Refining Company, 15 West 51st Street, New York 19, N. Y. And tell 'em Nosey sent you!

ESSO
VARSOL®

In Industry after Industry..."ESSO RESEARCH works wonders with oil"

Sodium tungstate, tech., kgs., dlvd. E lb. 1.32 • —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 • —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium formaldehyde sulfoxylate, dms., t.l., dlvd lb. .22½- —
dms., l.t.l., same basis lb. .23 • —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .28 • —
fib. dms., smaller lots, same basis lb. .30 • —
Solvent naphtha, coaltar, high-flash, tanks, frt. equald gal. .30 • .35½
Solvent naphtha, petroleum, straight aromatic, 310°-360°F b.r., 14° 16°C m.a.p., tankcars, New Jersey and New York gal. .29 • —
Houston, Texas gal. .29 • —
355°-420°F. b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York. gal. .30 • —
Houston, Texas gal. .30 • —
Solvent naphtha, petroleum, partial aromatic, 211°-265°F b.r., 31°C. m.a.p., tankcars, New Jersey and New York gal. .235 • —
286°-340°F. b.r., 22°C. m.a.p., tankcars, New Jersey and New York gal. .275 • —
Solvent naphtha, 319°-380°F. b.r., 27°C. m.a.p., tankcars, New Jersey and New York gal. .27 • —
322°-395°F b.r., 28°C m.a.p., tankcars, New Jersey and New York gal. .28 • —
Sorbitan monostearate fib dms., 20,000-lb. lots, works lb. .33½- —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .35½- —
fib. dms., smaller lots, works lb. .38½- .40½
Sorbitan tristearate, fib dms., 20,000-lb. lots, works lb. .34 • —
fib dms., 10,000 to 20,000-lb. lots, works lb. .36 • —
fib. dms., smaller lots, works lb. .39 • .41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb. .18 • —
dms., t.c.l. works lb. .19 • —
tanks, works lb. .16¼- —
cryst., resin grade, pellets, dms., c.l., works lb. .23 • —
dms., 1 to 5-ton lots, works lb. .25 .26
powd., dms., c.l., works lb. .38½- —
dms., 10,000 to 20,000 lb. lots, works lb. .40½- —
Sorbitol, soln., comyl., aqueous, dms., c.l., works lb. .26 • —
dms., t.c.l., works lb. .27 • —
Soya protein, chemically isolated, old process, bgs., c.l., works. lb. .23 • —
bgs., t.c.l., works lb. .23¼- .23½
Chemically isolated, new process, bgs c.l., works lb. .20 —
bgs., t.c.l. works lb. .20¼- .29½
Soybean meal, 44% bulk, unrestricted, Decatur ton. 47.50 • —
Soybean oil crude, tanks, Decatur lb. .09⅞- —
Foots, soapstock acid 95%, tanks, lb. .05 Nom.
Refd., alkali, dms. lb. .1418- .1433
tanks lb. .1218- —
Clarified, dms. lb. .1368- .1393
tanks lb. .1168- —
Salad, dms. lb. .1415- .1440
tanks lb. .1215- —
Soybean oil acids, dbl. dist., dms., lb. .16 • .18½
tanks lb. .13½- —
S. D., dms. lb. .14¾- .17¼
tanks lb. .12¼- —
Sparteine sulfate, cns., 100 oz. or more oz. .80 • —
Spearmint leaves dom., bls lb. 75 —
Spearmint oil, NF, dms lb. 7.00 • 7.80
Sperm oil bleached winter 45° dms lb. .1675- .1775
tanks lb. .1475- —
Nat., winter 45°, dms lb. .1575- .1675
tanks lb. .1375- —
Spermaceti wax, blocks, cs lb. .32 • .33
Cakes, cs. lb. .33 • .34
Spruce oil, cns., dms. lb. 2.10 • 3.55
Squill, white, bls lb. .16 • .18
Powd., bbls. bxs lb. .17 • .20
St. John's bread, edible, bls. lb. .17 • —
Stannic chloride, anhyd., dms., works lb. .817 • .839
Stannic oxide, dms., dlvd lb. 1.10 • 1.11
Stannous chloride, anhyd dms., works lb. 1.013 • 1.268
Hydrous, cryst., dms., works lb. .87½- .88½
Stannous sulfate, dms., works lb. 1.067 • 1.087
Star root (see Helonias root).
Stargrass root (see Aletris root.)
Stavesacre seed, bgs. lb. .60 • .61
Stearic acid, dbl., pressed, bgs lb. .15¼- .17¼
Single-pressed, bgs. lb. .14¼- .17¼
Triple-pressed, bgs. lb. .17 • .19½
Stearine, oleo (see Oleostearine.)
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 • —
tanks, Houston gal. .1475- —
tanks, group 3 gal. .12875 —
Stramonium leaves, bgs. lb. .16½- .18
Streptomycin sulfate, bulk gram. .03 • .032
Strontium bromide, NF, cryst., gran., 150-lb. dm., frt. equaid lb. 1.00 • —
Strontium carbonate, pure, dms., 5-ton lots or more, works lb. .35 • —
dms., 1 ton lots, works lb. .37 • —
Tech., dms., works lb. .19 • —
Strontium chromate fib. dms., dlvd. lb. .48 • —
Strontium iodide jars, 25-lb. lots lb. 3.57 • —
Strontium nitrate, bgs., c.l., works. 100 lbs. 11.00 • —
bgs., t.c.l., works 100 lbs. 12.00 • —
Strontium salicylate, NF, dms lb. 1.38 • —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works. ton. 56.70 -66.15
Strophanthin G (see Quabain, USP).
Strophanthin K bots. oz. 25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 • 3.75
Styrax gum USP cs. lb. 4.50 • 5.50
Styrene monomer, polymer grade, 99.6%, dms., c.l., frt. alld. lb. .17 • —
dms., t.c.l., same basis lb. .19 • —
tanks, same basis lb. .14½- —
Styrene monomer, tech., 99.2%, dms., c.l. lb. .1504- —
dms., t.c.l., same basis lb. .1704- —
tanks lb. .1254- —
Above prices are escalated for each calendar quarter on the basis of cost of benzene and petroleum refining labor.
Styrolyl acetate, bots. lb. 1.03 • 1.10
Succinic acid, purif., cryst., dms., t.l., frt. alld. lb. .62 • —
dms., l.t.l., same basis lb. .63 • .75
Succinic anhydride, dms., c.l., t.l., dlvd lb. .51 • —
dms., t.c.l., same basis lb. .52 • —
Sucrose, refd., white, bgs., refy E. lb. .0979- —

Sucrose acetate, isobutyrate, 90%, dms., t.l., dlvd lb. .33½- —
dms., l.t.l., same basis lb. .35 • —
tanks, same basis lb. .31 • —
100%, t.l., dms., dlvd. lb. .35½- —
l.t.l., dms., same basis lb. .37 • —
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., t.c.l., works lb. 1.00 • —
Sugar (see Sucrose).
Sugar cane, wax, dom., refd., slabs, 80-lb. ctns., works lb. .60 • .65
80-lb ctns., spot lb. .65 • .75
Sulfabenzamide, dms. kilo 8.80 9.90
Sulfabenzamide-sodium, dms. kilo. 9.00 -10.10
Sulfacetamide, USP, fib dms kilo. 6.61 6.83
Sulfacetamide-sodium, USP, fib. dms kilo. 8.15 9.25
Sulfadiazine, USP, microcrystals, dms kilo. 23.35 -24.45
USP, powd., dms. kilo. 22.60 -23.70
Sulfadiazine-sodium, USP, dms kilo. 24.80 -25.90
Sulfaguanidine, NF X, dms kilo 5.50 6.60
Sulfamerazine-sodium, USP, powd., dms kilo. 24.80 25.90
Sulfamethazine, USP XV, microcrystals, dms kilo. 19.65 -20.75
USP XV, powd., dms. kilo. 18.75 -19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs. 16.00 —
dms., t.c.l., t.t.l., works 100 lbs. 17.50 18.50
Gran., dms., c.l., t.l., works. 100 lbs. 14.75 —
dms., t.c.l., t.t.l., works 100 lbs. 16.25 -17.25
Sulfanilamide, NF, reg. 1,000 lb., frt. equaid lb. 1.50 • —
NF, fib. dm., frt. equaid lb. 1.55 • —
Sulfanilamide quinoxaline, veterinary, dms kilo. 16.28 • —
Sulfanilic acid, tech., dms. c.l., frt. alld lb. .21 • —
dms., t.c.l., frt. alld lb. .23 • —
Sulfapyridine, USP XV, powd., bots., tins kilo. 15.45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo. 16.55 -17.65
Sulfathiazole, NF X, microcrystals, dms kilo. 6.25 6.90
NF X, powd., dms. kilo. 5.50 6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more lb. 2.35 • —
Sulfur, comi., flour, bgs., mines. 100 lbs. 2.35 • —
bbls., mines 100 lbs. 3.30 • —
lump, bgs., mines 100 lbs. 2.25 • —
bbls., mines 100 lbs. 2.80 • —
Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines long ton. 23.50 • —
export, f.o.b vessels, Gulf ports. long-ton. 25.00 • —
US and Canada, f.o.b vessels Gulf ports long-ton. 25.00 • —
Domestic dark sulfur prices are $1 per long-ton lower
Sulfur, crude, imp., Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos long-ton. 24.00 —
Mexican dark sulfur price is $1 per long-ton lower.
Sulfur, refd., flowers, NF, bgs., mines 100 lbs 5.65 • —
bbls., mines 100 lbs 7.00 • —
flour, light, bgs., mines 100 lbs 5.25 • —
bbls., mines 100 lbs 6.25 • —
lump, bgs., mines 100 lbs 4.95 • —
rolls, bgs., mines 100 lbs 5.50 • —
bbls., mines 100 lbs 6.25 • —
salt block, bgs., mines 100 lbs 4.65 • —
virgin block, bbls., mines 100 lbs 4.70 • —
Sulfur, rubbermakers, comi., reg., bgs., mines 100 lbs 2.45 • —
bbls. mines 100 lbs 3.70 • —
98-100% passing through 325 mesh, bgs. mines 100 lbs 2.55 —
bbls. mines 100 lbs 3.80 —
refd., bgs mines 100 lbs 4.90 —
bbls., mines 100 lbs 6.05 —
treated, 2.5% mineral oil, bgs. mines 100 lbs 2.75 —
bbls. mines 100 lbs 4.00 —
Sulfur dichloride, ret. dms., c.l., works frt equald lb .05¼- —
ret. dms., t.c.l., same basis lb .06¼- —
tanks, same basis lb .04½- —
Sulfur dioxide, liq. comi., cyls., works, frt. equald lb. .10 • .12
multi-unit cars, works lb. .0535- —
tanks, works lb .045 • —
Sulfur dioxide, refrigeration, cyls., dlvd lb. .33 —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .05¼- —
dms., t.c.l., same basis lb. .06¼- —
tanks, same basis lb. .04½- —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs 2.00 —
cbys., t.c.l., works 100 lbs 2.30 • —
tanks, works ton. 18.60 • —
Sulfuric acid, 66° Be, cbys., c.l., works 100 lbs. 2.25 • —
cbys., t.c.l., works 100 lbs 2.55 3.35
tanks, works ton. 22.35 • —
98%, tanks, works ton. 23.50 • —
99%, tanks, works ton. 23.70 • —

To sample all these advantages in one alkali...

Get your SAMPLE of

You have *eleven good reasons* (count 'em!) for specifying Snowflake® or Snowfine® in processes and products—ranging from household and industrial cleansers to luxury bath preparations. You may even discover that these two granulations of Solvay® sesquicarbonate of soda offer you more features. Write for your liberal sample.

Sodium Nitrite • Caustic Soda • Calcium Chloride • Chlorine • Chloroform
Caustic Potash • Potassium Carbonate • Sodium Bicarbonate • Soda Ash
Ammonium Chloride • Methyl Chloride • Ammonium Bicarbonate • Vinyl Chloride • Methylene Chloride • Cleaning Compounds • Hydrogen Peroxide
Aluminum Chloride • Mutual® Chromium Chemicals • Snowflake® Crystals
Monochlorobenzene • Ortho-dichlorobenzene • Para-dichlorobenzene
Carbon Tetrachloride

Allied Chemical

SOLVAY PROCESS DIVISION
61 Broadway, New York 6, N. Y.

SOLVAY branch offices and dealers are located in major centers from coast to coast. Send export inquiries to Allied Chemical International, 40 Rector St., N. Y. 6.

SOLVAY PROCESS DIVISION 62-120
Allied Chemical Corporation
61 Broadway, New York 6, N.Y.

Please send without cost:
☐ A. Snowflake Crystal sample ☐ B. Snowfine sample
☐ C. Snowflake fact book
☐ Data on how these products can help my operation, described in attached letter.

Name_____
Position_____
Company_____
Phone_____
Address_____
City_____ Zone____ State_____

Sulfuric acid, 100%, tanks, works. ton 23.95 - —
CP, NF, consumers' cbys., c.l., frt. equald lb. .12¾ - —
Sulfuric acid, CP, NF, consumers', cbys., l.c.l., same basis. lb. .14¼ - .14¾
5-pt. bots., extra, cs., c.l., works, frt. alld lb. .16¼ - —
5-pt. bots., extra, cs., l.c.l., same basis lb. .17¾ - .18¾
Sulfuric acid, fuming (oleum), 20%, tanks, works ton 25.00 - —
40%, tanks, works ton 29.00 - —
65%, tanks works ton 39.50 - —
Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore unit-ton. .90 - .93
bulk, c.l., Carteret, N. J. unit-ton. .90 - .93
Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla., unit-ton. 1.00 - —
bulk, f.o.b. vessel at Fla. unit-ton. 1.05 - —
Sweet birch oil, USP, northern, cns. lb. 4.00 - 9.50
USP, southern, cns. lb. 2.00 - 3.05

T

2,4,5-T, dms., c.l., works, frt. equald. lb. 1.18 - —
dms., l.c.l., same basis lb. 1.25 - —
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald. lb. 1.24 - —
dms., l.c.l., works lb. 1.29 - —

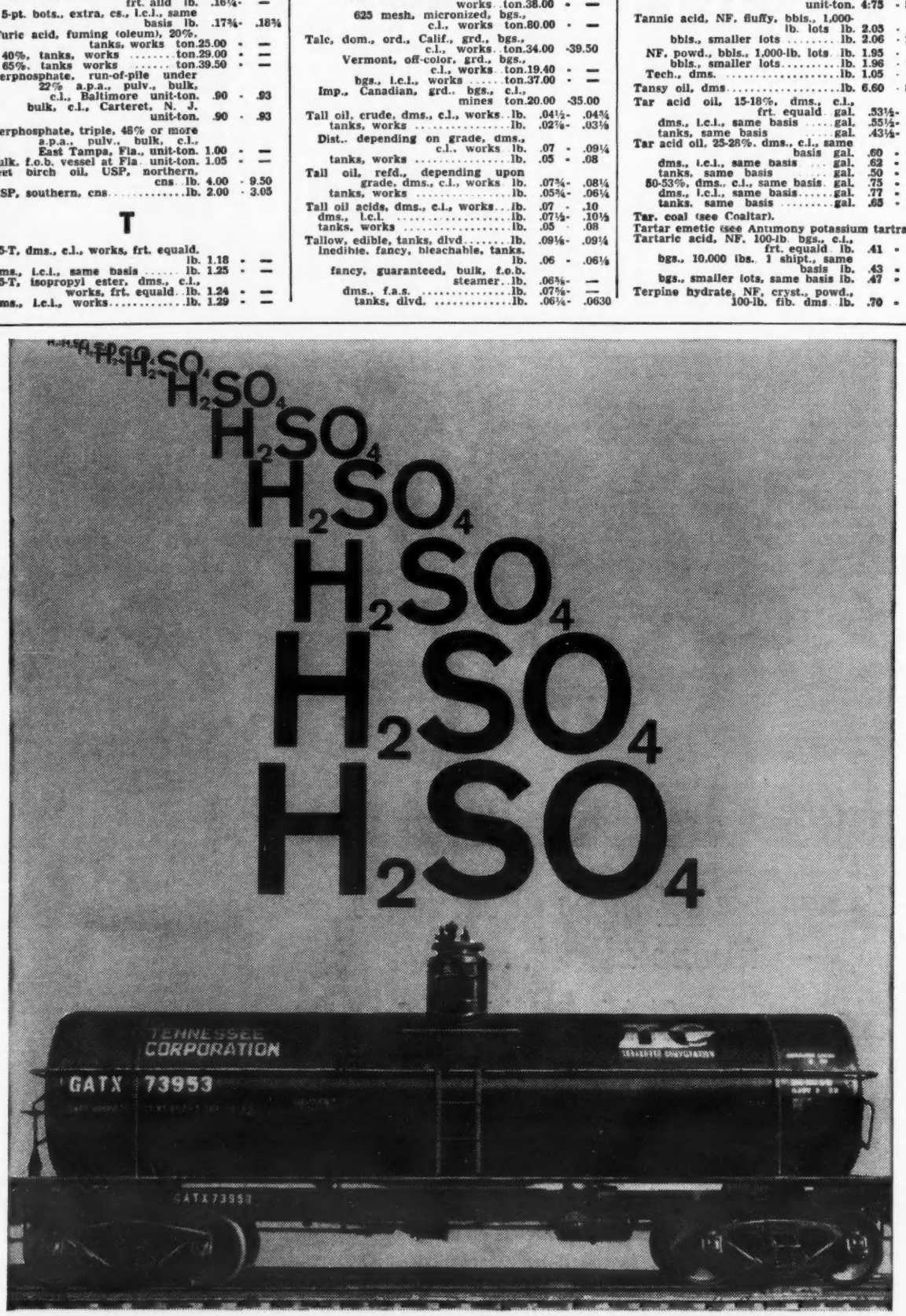
Talc, dom., fibrous, grd., bgs., c.l., works, New York ton 28.00 - —
bgs., l.c.l., works ton 31.00 - 36.00
fibrous, 99.5%, 325 mesh, bgs., c.l., works, New York ton 31.00 - —
bgs., l.c.l., works ton 34.00 - —
Talc, dom., fibrous, 99.95%, 400 mesh, micronized, bgs., c.l works ton 38.00 - —
625 mesh, micronized, bgs., c.l., works ton 80.00 - —
Talc, dom., ord., Calif., grd., bgs., c.l., works ton 34.00 - 39.50
Vermont, off-color, grd., bgs., c.l., works ton 19.40 - —
bgs., l.c.l., works ton 37.00 - —
Imp., Canadian, grd., bgs., c.l., mines ton 20.00 - 35.00
Tall oil, crude, dms., c.l., works lb. .04½ - .04¾
tanks, works lb. .02⅞ - .03⅛
Dist., depending on grade, dms., c.l., works lb. .07 - .09¼
tanks, works lb. .05 - .08
Tall oil, refd., depending upon grade, dms., c.l., works lb. .07¾ - .08¼
tanks, works lb. .05¾ - .06¼
Tall oil acids, dms., c.l., works lb. .07 - .10
dms., l.c.l. lb. .07½ - .10½
tanks, works lb. .05 - .08
Tallow, edible, tanks, dlvd. lb. .09⅛ - .09¼
Inedible, fancy, bleachable, tanks. lb. .06 - .06⅛
fancy, guaranteed, bulk, f.o.b. steamer lb. .06⅝ - —
dms., f.a.s. lb. .07⅝ - —
tanks, dlvd. lb. .06¼ - .0630

Tallow, inedible, No. 1, tanks, dlvd. lb. .05 - .05½
lb. .05 - .05⅛
Prime, tanks, dlvd. lb. .05⅞ - .06
Special, tanks, dlvd. lb. .05½ - .05⅝
Sulfonated, 25%, bbls., l.c.l. lb. .08½ - .08¾
50% bbls., l.c.l. lb. .10½ - .11
Tallow acids, dist., dms. lb .11¾ - .14¼
tanks lb. .09¼ - —
Hydrogenated, dms. lb. .14 - .16½
Tallow oil, acidless, dms., c.l. lb. .13½ - —
dms., l.c.l. lb. .14½ - .15½
Tangerine oil, Florida, dms. lb. 4.75 - —
Tankage, animal, feeding, 9-11% ammonia, New York bulk. unit-ton. 4.75 - 5.00
Tannic acid, NF, fluffy, bbls., 1,000-lb. lots lb. 2.03 - —
bbls., smaller lots lb. 2.06 - 2.07
NF, powd., bbls., 1,000-lb. lots lb. 1.95 - —
bbls., smaller lots lb. 1.96 - 1.99
Tech., dms. lb. 1.05 - —
Tansy oil, dms lb. 6.60 - 8.00
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .53½ - —
dms., l.c.l., same basis gal. .55½ - —
tanks, same basis gal. .43½ - —
Tar acid oil, 25-28%, dms., c.l., same basis gal. .60 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms., c.l., same basis gal. .75 - —
dms., l.c.l., same basis gal. .77 - —
tanks, same basis gal. .65 - —
Tar, coal (see Coaltar).
Tartar emetic (see Antimony potassium tartrate).
Tartaric acid, NF, 100-lb. bgs., c.l., frt. equald lb. .41 - —
bgs., 10,000 lbs., 1 shipt., same basis lb. .43 - —
bgs., smaller lots, same basis lb. .47 - —
Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms. lb. .70 - —

Terpineol, extra, dms. lb. .50 - .60
Prime, dms. lb. .40 - .50
Terpinyl acetate, extra, cns., dms. lb. .64 - .75
Prime, dms lb. .53 - .56
Terpinyl propionate, dms. lb. 1.65 - 1.70
Testosterone, USP, bots. gram. No prices.
Testosterone propionate, USP, bots. gram. No prices.
Tetrachloroethane, dms., works lb. .14½ - —
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Tetrachloroethylene, tech. (see Perchloroethylene).
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20½ - —
dms., l.c.l., works lb. .22 - .23½
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .60 - —
dms., l.c.l., dlvd. E lb. .61½ - —
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .53½ - —
dms., l.c.l., dlvd. E lb. .55 - —
tanks, dlvd. E lb. .51 - —
Tetraethylthiuram disulfide, tech., dms., frt. alld lb. 1.04 - —
Tetrahydrofuran, dms., c.l., t.l., works lb. .36½ - —
dms., l.c.l., or t.l.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .31½ - —
dms., l.c.l., Memphis, Tenn lb. .32½ - —
dms., c.l., t.l., Newark, N.J lb. .33½ - —
dms., l.c.l., Newark, N.J lb. .34½ - —
tanks, dlvd. E. of Denver lb. .31 - —
tanks, dlvd. W of Denver lb. .32 - —
Tetrahydrophthalic anhydride, dms., c.l., t.l., frt. alld. E lb. .39 - —
l.c.l., t.t.l., same basis lb. .41 - —
Tetrapotassium phosphate (see potassium phosphate).
Thallium metal, dlvd. lb. 7.50 - 10.00
Thallium sulfate, 99%, bots., dlvd. lb. 5.00 - 10.00
Theobromine, NF, fib dms., 100-lbs., f.o.b., works lb. 4.10 - 4.15
Theobromine and sodium acetate, USP, fib. dms., 500-lbs. works lb. 6.45 - —
Theobromine, sodio-salicylate, NF, fib. dms., 500-lbs., works. lb. 3.80 - —
Theophyline, USP, anhyd., 100-lb. dms., frt. alld lb. 3.65 - —
Thiamine hydrochloride, USP, fib. dms., frt. alld kilo. 36.00 - —
USP, ampule grade, fib., dms., frt. alld kilo. 38.00 - —
Thiamine mononitrate, USP, fib. dms., frt. alld kilo. 36.00 - —
Thiocarbanilide, dms., ton lots lb. .74 - —
dms., less ton lots lb. .76 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb. 5.20 - —
Tungstated, PTMA, kgs., works lb 6.20 - —
Thioglycolic acid, refd., 55 gal dms., ton lots, 100% basis lb. 1.15 - —
Thiosalicylic acid, 80%, dms., 1,000-lb., lots, works lb. 4.00 - —
Thiourea, tech., bgs., t.l., frt. alld. lb. .30 - —
bgs., ton lots, same basis lb. .32 - —
bgs., less than ton lots, same basis lb. .33 - —
Thorium nitrate, purif., fib. dms., 100-lb. lots or more. works lb 3.50 - —
dl-Threopine, dms., 100 kilos, works. kilo. 121.00 - —
Thyme leaves, French, triple sifted extra, bgs lb. .27 - —
Spanish, extra, bgs lb. .12 - —
triple sifted, bgs. lb. .25 - —
Spanish, bgs. lb. .09 - —
Thyme oil, NF, red, cns., dms lb. 2.00 - —
NF, white, cns lb. 2.20 - —
Tech., white, cns. lb. .40 - 1.85
Thymol, fib. dms., 25-lbs., f.o.b. works lb. 2.45 - —
Thymol iodide, NF, dms., 100-lbs f.o.b. works lb. 7.30 - —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhyd.).
Tin crystals (see Stannous chloride, hydrous).
Tin metal (Straits) lb. 1.03 - —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride, anhyd. (see Stannic chloride, anhyd.).
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd lb. .25½ - —
bgs., l.c.l., dlvd. lb. .26½ - —
reg., bgs., c.l., dlvd. lb. .25½ - —
bgs., l.c.l., dlvd. lb. .26½ - —
metallurgical, nat., bgs., c.l., f.o.b. Jacksonville, Fla. ton. 180.00 - —
bgs., 5-ton lots, Niagara Falls, N. Y. ton. 205.00 - —
bgs., ton lots, same basis ton. 215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Titanium dioxide, rutile, nonchalking, bgs., c.l., dlvd. E lb. .27½ - —
bgs., l.c.l., dlvd. E lb. .28½ - —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd lb. .09¾ - —
bgs., l.c.l., works lb. .09⅞ - —
50% Ti O_2, high-tinting, dms., c.l., lb. .14⅜ - —
dms., l.c.l. lb. .14⅞ - —
Titanium hydride, powd., dms., works lb. 8.10 - 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27½ - .29
tanks, works lb. .20 - —
Tobias acid, dms., c.l., t.l. lb. .81 - —
dms., l.c.l. lb. .84 - —
d-a-Tocopherols, NF, mixer, conc., pure basis, bots kilo. 67.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. 122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo. 109.00 - —
dl-a-Tocopherol, bots. kilo. 99.00 - —
dl-a-Tocopheryl acetate, bots kilo. 90.00 - —
25% dry, powd., bots. kilo. 22.50 - 24.00
33% dry, powd., bots. kilo. 30.00 - 31.50
o-Tolidine base, dry, kgs., 100% basis lb. 1.55 - —
Paste, kgs., 100% basis lb. 1.50 - —

TOLUOL
Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine, hydrochloride paste, kgs., 100% basis lb. 1.50 - —
Tolu balsam, cns. lb. 3.50 - 3.65
Toluene, coaltar, indust., nr nitration, tanks, dlvd. E. of Rockies gal. .25 - —
Toluene, petroleum, indust., tanks, f.o.b., frt. equald gal. .25 - —
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 - —
dms., l.t.l., same basis lb. .63 - —



Satisfying the Southeast's Sulfuric Acid Requirements for more than fifty years.

Highest quality virgin acid from Copperhill, Tennessee. 60° Be, 66° Be, 98% Sulfuric Acid and all grades of Oleum.

For more information see our Inserts—
Chemical Week Buyers Guide Pages 173-176
Chemical Materials Catalog Pages 551-554

TENNESSEE CORPORATION
512-629 GRANT BUILDING, ATLANTA 3, GEORGIA

Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld lb. .18 - —
1,000-lb or more, same basis lb. .18 - —
less than 1,000-lb., same basis lb. .23 - —
tanks, same basis lb. .14 - —
Toluenesulfonic acid in 10-gal. dms., 2c per lb. more.
p-Toluenesulfonic acid mononydrate, dms., c.l., or t.l lb. .90 - —
dms., 125 lbs. to t.l. lb. 1.00 - —
m-Toluidine, dms. c.l., works, frt. alld lb. .83 - —
dms., t.c.l., same basis lb. .34 - —
tanks, same basis lb. .82 - —
o-Toluidine, dms. c.l., works, frt. alld lb. .30 - —
dms., t.c.l. same basis lb .31 - —
tanks, same basis lb. .28 - —
p-Toluidine tech flake, dms., frt. alld lb. .50 - —
Cast, dms. frt. alld. lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs, works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., t.c.l., frt alld lb. 1.10 - —
Tonka beans, Angostura, cks. lb. 1.50 - —
Brazilian Surinam cs lb. 1.30 - —
Totaquine, 100-oz lots, cns. oz. .42 - —
Toxaphene dms. c.l. t.l., works. lb. .22 - —
dms. t.c.l. t.l.l. works lb. .28 - —
Tragacanth gum No. 1, ribbons, cs lb. 4.10 4.20
No. 2, cs lb. 3.75 3.80
No. 3, cs lb. 3.40 3.65
USP powd., bbls. lb 1.05 1.15
Triacetin dms. c.l., dlvd. E. of Rockies lb. .39 - —
dms., t.c.l. same basis lb. .40 - —
tanks, same basis lb. .37 - —
Triallylamine, dms., c.l., dlvd. lb. .935 - —
dms., t.c.l., dlvd lb. .995 - —
tanks, dlvd lb. .96 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt alld E of Denver. lb. .42½- —
non-ret dms., t.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt. alld E of Denver lb. .40 - —
Tributyl phosphate, dms., c.l., works. lb. .52½- —
dms. t.c.l. same basis lb. .53½- —
tanks, same basis lb. .50 - —
Tributylamine dms., c.l., works lb. .67½- —
dms., t.c.l., same basis lb. .69 - —
tanks, same basis lb. .65 - —
Tributyrin dms t.c.l. dlvd. lb. .69 - —
Trichloroacetic acid, tech., 300-lb. dms. c.l., f.o.b. works lb. .52 - —
USP, 100-lb. dms., frt. equald lb. 1.25 - —
Trichlorobenzene dms c.l. frt alld E lb. .15 - —
dms., t.c.l. frt. alld. E. lb. .16 - —
tanks, frt. alld E. lb. 13¼- —
Trichlorobenzene prices in the West 1¾c. higher
1,1,1-Trichloroethane dms., c.l., dlvd. lb. .13¼- —
dms., t.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .12¼- —
1,1,2 Trichloroethane, dms., c.l., works lb. .13½- —
dms t.c.l. dlvd E lb. .14¼- —
tanks works lb. .11½- —
Trichloroethylene dms., c.l., or t.l., dlvd lb. .14 - —
dms. t.c.l., dlvd lb. .15¼- —
tanks dlvd lb. .12¾- —
Trichloroisocyanuric acid, dms., c.l., t.l., frt equald lb. .65 - —
dms. t.c.l. same basis lb. 75 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ret. cbys. works, frt. adjusted. lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
dms., t.c.l., dlvd. lb. .36 - —
tanks, dlvd lb. .32½- —
Tricresyl phosphate, petroleum, dms., c.l., dlvd. lb. .35 - —
dms., t.c.l., dlvd. lb. .36 - —
tanks, dlvd lb. .32½- —
Tridecyl alcohol, mixed isomers, dms. c.l., dlvd. E lb. .26½- —
dms., t.c.l., dlvd. E lb. .28 - —
tanks, dlvd E lb. .24 - —
Triethanolamine dms., c.l., dlvd. E. lb. .24½- —
dms., t.c.l., same basis lb. .26 - —
tanks, same basis lb. .22 - —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½- —
dms., t.t.l., frt. alld. lb. .26½- —
tanks, frt alld lb. .24½- —
Triethylamine dms., c.l., dlvd. E. lb. .50 - —
dms., t.c.l., same basis lb. .51½- —
tanks, same basis lb. .47½- —
Triethyl nitrate retd., tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .46¼- —
non-ret. dms., t.c.l., frt. alld. E. of Denver lb. .47¼- —
tanks, frt. alld. E. of Denver. lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., t.c.l., dlvd. lb. .42 - —
tanks, dlvd lb. .33 - —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 - —
dms., t.c.l., dlvd. E lb. .22½- —
tanks, same basis lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E. lb. .51½- —
dms., t.c.l., dlvd. E. lb. .53 - —
tanks, dlvd E lb. .49 - —
Triisobutylene, tanks, dlvd. lb. .08 - —
Tri-isopropanolamine, dms., c.l., dlvd. E. lb. .23¼- —
dms., t.c.l., dlvd. E. lb. .24¾- —
tanks, dlvd E lb. .20¾- —
Trimethylamine, anhyd., cyls., t.c.l., frt. equald, 100% basis lb. .30 - .305
tanks, frt. equald, 100% basis. lb. .26 - —
25-40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., t.c.l., frt. equald, 100% basis lb. .35½- —
tanks, 100% basis, frt. equald lb. .26 - —
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .35 - —
dms., t.c.l., t.t.l., same basis lb. .36 - —
Trioxanes, pure, dms., c.l., t.l., works lb. .50 - —
dms., t.c.l., works lb. .51½- —
Tripentaerythritol, bgs., c.l., t.l., dlvd. E lb. .34 - —
bgs., t.c.l., t.t.l., dlvd. E lb. .35 - —
Triphenyl pnosphate, bbls., c.l., frt. equald lb. .41½- —
bbls., t.c.l., frt. equald lb. .43½- —
Triphenylguanidine, bbls., works lb. .90 - —
Tripropylene, dms., c.l., dlvd. E gal. .44 - —
dms., t.c.l., same basis gal. .54 - —
tanks, same basis gal. .28 - —
Tripropylene glycol, dms., c.l., t.l., frt. alld. E lb. .20½- —
dms., t.c.l., t.t.l., frt. alld. E lb. .22 - —
tankcars and compartmented tankcars, frt. alld. E lb. .17½- —
Tripropylene glycol, tankwagon and compartmented tankwagons, 1,000 gals. min. frt. alld. E lb. .18 - —
Tripropylene glycol prices 1c. per lb. higher in west.

Trisodium phosphate (see Sodium phosphate tribasic).
di-Tryptophane, dms., 1 kilo, works. kilo. 154.00 - —
Tung oil, dms., New York lb. .24¼- .24¾
tanks, imported lb. .22¼- .22½
tanks, domestic mills lb. .22½ Nom.
Tungsten metal, powd. 2.0-2.5 microns, dms., works lb. 4.25 - —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
dms., smaller lots, works lb. 2.45 - —
Turkey red, bbls., works lb. .62 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .28 .50
Tuscan red bbls. frt equald lb .26 .32
Tyrothricin, USP, 1 to 5 kilos gram. .50 - —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb bbls., dlvd. E. of Rockies lb. .30½- .35
Jobbing types, dry, bbls., same basis lb. .16 - .22½
Regular types, dry bbls., same basis lb. .16 - .37½
Ultramarine blue prices 1c. higher W. of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., t.c.l., works lb. .07¾- .08
Umber pigment, burnt, turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y lb. .08¼- —
Raw, American, bgs., works lb. .07¾- .08¼
Turkey-type, bgs., works lb .08½- .08¾
Undecylenic acid, 55-gal. dms., f.o.b. works lb. 1.28 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E. ton. 98.00 - —
bgs., t.c.l., dlvd. E. ex whse ton. 100.00 - —
45% N, agricultural, bgs. c.l., (30 tons) dlvd. E. ton. 100.00 - —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks, frt. equald ton. 120.00 - —
37 grade, tanks, same basis ton. 145.00 - —
Urethane USP dms., t.l., f.o.b., works lb .65 - —
dms., t.t.l., same basis lb 70 - —
Uva-ursi leaves, bls lb. .12 - —

V

Valerian root, Belgian bgs. lb .32 - —
Indian, bgs lb .25 - —
dl-Valine, dms., 1 kilo, works kilo. 37.00 - —
Vanadium pentoxide, tech. dms. works lb. 1.38 - —
Vandyke brown, bbls. works lb 09½- .12
Vanilla beans, Bourbon, tins lb 8.25 - —
Mexican cuts, tins lb. 8.50 - —
whole, tins lb. 9.00 - —
Vanillin ex lignin 100-lb fib dms. 2,000-lb. lots or more lb. 2.50 - —
less than 2,000 lbs lb. 2.70 - —
Venetian red, jobbing, bgs., works lb. .0475- —
Venetian red, 20%, bgs., works lb .0525- —
25%, bgs., works lb .0575- —
30%, bgs., works lb .06 - —
35%, bgs., works lb .0625- —
40%, bgs., works lb .0675 - —
Vetiver oil, Bourbon, cns lb. 17.00 -17.25
Haitian, cns. lb. 12.00 -14.00
Victoria blue toner, molybdated. PMA 250-lb bbls., dlvd. E. of Rockies lb 4.50 4.95
Tungstated, PTMA, 250-lb bbls., dlvd. E of Rockies lb 5.55 —
Victoria blue toner, bbls. prices 1c higher W of Rockies
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., dlvd lb. .1810 —
55-gal. dms., t.c.l., dlvd lb. .1960 —
tanks, dlvd. lb 1560 —
tanktrucks less than 4,000 gal. dlvd lb. .1610 —
Zone 2, 55-gal. dms. c.l., dlvd lb. .1910 —
55-gal. dms., t.c.l., dlvd lb. .2210 —
tanks, dlvd. lb. .1660 —
tanktrucks, less than 4,000 gals., dlvd lb. .1710 —
Zone 1 is all continental US except zone 2, zone 2 comprises Ariz. Calif., Idaho, Mont., Nev., Ore., Utah and Wash.
Vinyl n-butyl ether, tech., dms., t.c.l., works lb. .50 - —
Vinyl chloride monomer tanks, works, min. frt. alld. E. of Rockies lb. .113 - —
Vinyl ether, USP, anethesia, bots., 50cc., hospitals bot 1.12 —
bots., 75cc., hospitals bot 1.56 - —

Cowles provides high purity Toluic Acids in commercial quantities

Whether your interest is in pharmaceuticals, insecticides, dyestuffs, alkyd resins or polyester resins, Cowles' facilities for large-scale production of o-Toluic, m-Toluic and p-Toluic acids make it possible for you to consider their various advantages as organic building blocks in commercial operations.

Send for Technical Data Sheets and prices.

1885 Cowles 1960

75th Anniversary

CHEMICAL COMPANY

Cleveland 3, Ohio

Vinyl ethyl ether, tech., dms., c.l., works	lb.	.30¼	—
dms., t.c.l., works	lb	.31	—
tanks, works	lb.	.28¼	—
Vinyl propionate monomer, dms. c.l. dlvd	lb	.49	—
dms., t.c.l. same basis	lb	.50	—
tanks, same basis	lb	.47	—
Vinyl trichloride (see Trichloroethane)			
2-Vinylpyridine, 10 dms to tanks, works	lb	1.20	—
1 to 9 dms., works	lb	1.35	—
tanks, works	lb	1.15	—
Vinyltoluene dms. c.l., f.o.b. works	lb	16½	—
dms., t.c.l. same basis	lb	18½	—
tanks, f.o.b. dest frt prepaid	lb.	14	—
Viosterol in oat vegetable oil, 1,000,000 D units per gram bots., lots of 10 billion USP units 1,000,000 units		.02½	—
Virginia type red bbls., works	lb	1.40	—
Vitamin A acetate, syn., cryst., beads 500,000 A units per gram	gram	.07¼	—
Vitamin A acetate dry, 500,000 units per gram, kilo lots	kilo	65.00	—
325,000 units per gram, same basis	kilo	43.88	—
250,000 units per gram, same basis	kilo	33.75	—
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher			
Vitamin A, liq. in oil, 1,000,000 A units per gram 1,000,000 units		.09½	—
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units		.09½	—
Vitamin B_1 (see Thiamine hydrochloride).			
Vitamin B_2 (see Riboflavin and Yeast).			
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams vials, tins	gram	45.00	—
0.1% vitamin B_{12}, USP adsorbed on gelatin, 100 and 500-gram bots. on 1-5 kilo dms.	gram	1.00	—
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms., gram		1.00	—
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B^{12} activity	gram	52.00	—
0.1% trituration of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo		52.00	—
Vitamin B_{12}, 0.1% cobalamin concentrate, NF adsorbed on resin 500-gram bots., 1-5 kilo, dms., frt alld	gram	.90	—
0.1% cobalamin concentrate in gelatin 1-10 kilo dms., frt alld	gram	.90	—
Vitamin C (see Ascorbic acid).			
Vitamin D, (see Codliver and Fishliver oils, Calciferol and Viosterol)			
Vitamin D, dry, 850,000 units per gram, kilo lots	kilo	42.50	—
850,000 units per gram less than kilo lots	kilo	45.00	—
Vitamin E (see a-Tocopherol and Wheat germ oil).			
Vitamin H (see Biotin).			
Vitamin K, active (see Menadione).			
Violet methyl toner (see Methyl violet toner).			
VM&P naphtha (see Naphtha, VM&P, petroleum).			

W

Wahoo root bark, bls.	lb.	2.00	2.25
Warfarin, 0.5% dms., 50-lb. lots, dlvd	lb.	1.95	—
dms., 25-49-lb. lots, New York or Chicago	lb.	2.05	—
dms., 5-24-lb. lots, New York or Chicago	lb	2.15	—
Watchung-type reds., bbls	lb.	1.95	—

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms.	gal.	12.25	—
White lead (see Lead, white).			
White mineral oil (see Mineral oil, white).			
White pine bark, rossed, bls.	lb.	.21	.22
White precipitate USP powd., dms., 100 lbs. f.o.b works	lb	5.50	—
Whiting (see Calcium carbonate)			
Wild cherry bark, thin, nat., bls.	lb.	.30	—
Wintergreen oil USP nat northern, cns	lb.	6.35	17.50
USP, nat southern cns	lb.	3.75	7.00
Wintergreen oil, syn. (see Methyl salicylate).			
Witch hazel bark, bls	lb	.16	.17
Witch hazel leaves, bls.	lb.	.35	.40
Wollastonite, fine, paint grade, bgs., c.l., works	ton.	41.00	—
bgs., t.c.l., ex whse.	ton.	51.00	—
Medium, paint grade, bgs., c.l., works	ton.	29.00	—
bgs., t.c.l., ex whse.	ton.	39.00	—
Wood alcohol (see Methanol).			
Wood oil (see Tung oil).			
Woolfat crude (see Degras).			
Woolfat USP (see Lanolin).			
Wormseed-Levant type	lb.	2.50	—
Wormseed oil (see Chenopodium oil NF).			
Wordwood oil, cns.	lb.	4.50	4.75

X

Xylene coaltar, indust., tanks, works: Bethlehem, Pa.	gal.	.29	—
Birmingham dist.	gal.	.29	—
Chicago dist.	gal.	.28½	—
Cleveland dist.	gal.	.29	—
Geneva, Utah	gal.	.29	—
Johnstown, Pa.	gal.	.29	—
Lackawanna, N.Y.	gal.	.29½	—
Lone Star, Tex.	gal.	.27	—
Lorain, Ohio	gal.	.29	—
Middletown, Ohio	gal.	.30	—
Xylene, coaltar, indust., tanks, works: Minnequa, Colo.	gal.	.29	—
Philadelphia dist.	gal.	.29	—
Pittsburgh dist.	gal.	.29	—
Sparrows Point, Md.	gal.	.29	—
Terre Haute, Ind.	gal.	.29	—
Youngstown, Ohio	gal.	.29	—
Xylene, petroleum, indust., tanks f.o.b. works: Bayonne, N.J.	gal.	.29	—
Baytown, Tex.	gal.	.27	—
Charleston, S. C.	gal.	.29	—
Chicago, Ill.	gal.	.28½	—
Detroit, Mich., dlvd	gal.	.27½	.29
Houston, Tex.	gal.	.27	—
Philadelphia, Pa.	gal.	.29	—
Providence, R. I.	gal.	.30	—
Sewell's Point, Va.	gal.	.28	—
Wood River, Ill.	gal.	.28½	—
m-Xylene, 95% dms., c.l., f.o.b. Richmond, Calif.	lb.	.25	—
dms., t.c.l., f.o.b. Richmond, Calif.	lb.	.26	—
tanks, frt. alld.	lb.	.23	—
o-Xylene, dms., c.l., works	lb.	.08	—
dms., t.c.l., works	lb.	.09	—
tanks, works	lb.	.06	.06½
p-Xylene, dms., c.l., works	lb.	.20	—
dms., t.c.l., works	lb.	.21	—
tanks, frt. alld.	lb.	.16	.45 —
Xylenol, cryst., 45°-47°C., m.p., dms., t.c.l., works, frt. equald	lb.	.23	—
56°-58°C. m.p. dms., t.c.l., works, frt. equald	lb.	.33	—
Xylenol, cryst., 60°-62°C., m.p., dms., t.c.l., same basis.	lb.	.40	—
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis	gal.	1.25	—
dms., t.c.l. same basis	gal.	1.30	—
tanks, same basis	gal.	1.05	—
b.r. 7°-9° C., dry at or below 227° C., dms., c.l. same basis.	gal.	1.35	—
Xylenol fraction, b.r. 7°-9° C., dry at or below 227° C., dms., t.c.l. same basis	gal.	1.40	—
2,4-Xylidine, tech., dms. frt. alld.	lb.	1.15	—
2,5-Xylidine, tech. dms. frt. alld.	lb.	1.20	—
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works	lb	.39	—
dms., t.c.l. same basis	lb	.40	—
tanks, same basis	lb	.33	—

XYLOL
Xylol quotations, both coaltar and petroleum, may be found under Xylene

Y

Yara yara oil, cns.	lb	2.15	3.05
Yeast, brewers, debittered, USP XV, Saccharomyces, dlvd	lb.	.27	—
Yeast, brewers, primary, USP XV, 150 meg. B^1 per gram, 100-lb. dms	lb.	.47	—
USP XV, 270 meg., B^1 per gram, 100-lb. dms	lb.	.52	—
USP XV, 300 meg., B^1 per gram, 100-lb. dms	lb.	.56	—
USP XV, 900 meg., B^1 per gram 100-lb. dms.	lb.	.60	—
Torula, USP dlvd.	lb	.18	—

YELLOW PIGMENTS
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow

Yerba santa leaves, bls.	lb	.40	.45
Ylang-ylang oil, Bourbon, bots	lb.	7.00	22.00
Ylang Ylang oil, Bourbon, extra bots	lb	24.00	33.00
Yohimbine hydrochloride, bots., tins.	oz.	3.75	4.25

Z

Zein, bgs., 36,000-lb. lots or more, bgs. 500-lb. lots or more, dlvd	lb.	.343	—
bgs. smaller lots, dlvd	lb.	.373	—
Zinc acetate, NF, VIII, dms	lb.	.53	—
Tech., dms., t.l. works	lb.	.29¾	—
Zinc borate, bgs., 1,000 lbs or more, works	lb.	.25	—
bgs. less than 1,000 lbs., same basis	lb.	.27	—
Zinc chloride, NF, gran., dms	lb.	.42	—
NF, precip., powd., dms	lb.	.26	—
Tech., soln., 50%, dms., c.l., works 100 lbs.		5.80	—
dms., t.c.l., works 100 lbs		6.40	—
tanks, works 100 lbs		5.15	—
fused, dms., c.l., works 100 lbs.		10.70	—
dms., t.c.l., works 100 lbs.		11.20	—
gran., fib, dms., c.l., works, 100 lbs.		11.45	—
fib dms. t.c.l., works 100 lbs.		11.95	—
Zinc chromate bbls., dlvd.	lb.	.29	—
Basic bbls., dlvd.	lb.	.34	—
Zinc cyanide, dms., 1,000-lb. lots or more, works	lb.	.55	—
dms., smaller lots, works	lb.	.57	—
Zinc dust coml. bbls., c.l. works,	lb.	.17	—
Pigment, bbls., c.l., works	lb.	.16½	—
bbls., t.c.l., works	lb.	.18¼	—
Zinc fluoride, bbls., works	lb.	.49	.50
Zinc hydrosulfite, dms., c.l., frt. alld	lb.	.21½	—
dms., t.c.l., frt. alld.	lb.	.23½	—
Zinc metal prime western, slabs, E. St. Louis	lb	.13	—
Prime western slabs, New York,	lb.	.13½	—
Zinc naphthenate liq 8% Zn., dms., frt. alld	lb.	.27	—
10% Zn., dms., frt. alld	lb.	.33	—
Zinc nitrate, tech., flake, 100-lb. fib, dms., t.c.l.	lb.	.16½	—
300-lb. fib, dms, t.c.l	lb.	.14½	—
300-lb. fib, dms., c.l.	lb.	.14	—
Zinc oxide, pigment, American process, lead-free bgs. c.l., frt. alld	lb	.14½	—
bgs., t.c.l., 10 tons or more, same basis	lb.	.15	—
bgs., t.c.l., smaller lots, same basis	lb.	.15½	—

MONTROSE
CHEMICAL COMPANY
100 LISTER AVENUE
NEWARK, NEW JERSEY

Dimethyl Isophthalate

T.C.P.— Tricresyl Phosphate

Cresyl Diphenyl Phosphate

D.D.T.— Dichloro Diphenyl Trichloroethane

Ethyl Silicate 28% — 40%

Triphenyl Phosphate

Send for literature and samples

EXCLUSIVE SALES AGENT

R. W. Greeff & Co., Inc.

10 ROCKEFELLER PLAZA, NEW YORK 20, N. Y. • Circle 6-9680

1721 TRIBUNE TOWER, CHICAGO 11, ILLINOIS • WHitehall 4-6960

Zinc oxide, leaded, 35% bgs., c.l., mills, frt. alld.	lb.	.15½-	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.15½-	—
50%, bgs., c.l., same basis	lb.	.15¾-	—
pigment, American process, leaded, 50%, bgs., l.c.l., 10 tons or more, same basis,	lb.	.16¼-	—
French process, green seal, bgs., c.l., mills, frt alld	lb.	.16¼-	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¾-	—
Zinc oxide, French process, green seal, bgs., l.c.l., smaller lots, same basis	lb.	.17¼-	—
red seal, bgs. c.l. same basis,	lb.	.15¾-	—
Zinc oxide, French process, green seal, bgs., l.c.l., 10 tons or more, same basis	lb.	.16¼-	—
bgs. l.c.l. smaller lots, same basis	lb	16¾-	—
Zinc oxide, white seal, bgs., c.l., same basis	lb.	.16¾-	—
bgs., l.c.l., 10 tons or more, same basis	lb	.17¼-	—
bgs., l.c.l., smaller lots, same basis	lb	.17¾-	—
Zinc oxide, USP dms. c.l. frt alld.	lb.	.18¼-	—
dms., l.c.l., 10 tons or more, same basis	lb	.18¾-	—
dms. l.c.l., smaller lots, same basis	lb	.19¼-	—
Zinc phenolsulfonate NF gran., dms	lb	45	46
NF powd. dms	lb	48	49
Zinc resinate precip 7.2-7.6% Zn. dms., frt. alld	lb.	.45 -	—
Zinc silicofluoride, ms works	lb	2½	14
Zinc stearate, USP, ctns., c.l.	lb.	.41 -	—
	lb	41	—
ctns. l.c.l.	lb	42	.46
Zinc sulfate, powd., monohydrate, 36% Zn bgs. c.l. dlvd.E.	100 lbs	8.75	—
bgs. l.c.l. dlvd E.	100 lbs	9.75	—
Zinc sulfate in bbls 40c higher			
Zinc sulfide, pure bgs. c.l. dlvd	lb	2530-	—
Zinc undecylenate, 75-lb. fib. dms., f.o.b. works	lb.	2.04 -	—
Zinc yellow (see Zinc chromate)			
Zinc-ammonium chloride, bgs., c.l. works	100 lbs.	10.25 -	—
bbls. c.l., works	100 lbs.	10.85 -	—
bbls. l.c.l. works	100 lbs.	11.35 -	—
Zinc-formaldehyde sulfoxylate, basic, 300-lb. dms., frt. alld	lb	26 -	—
Normal, 250-lb. dms., frt. alld	lb.	.55 -	—
Zircon (G) gran. bgs. c.l. works.	lb.	03½-	—
Zircon (G) gran., bgs., 5 tons to c.l., works	lb.	.03⅜-	—
bgs. 1 ton to 9,999-lb. lots, works	lb.	.04	—
bgs., smaller lots, works	lb.	.06½-	—
Zircon (G) milled bgs. c.l. works.	lb.	.04⅛-	—
bgs. 5 tons to c.l. works	lb.	.04⅜-	—
bgs. 1 ton to 9,999-lb lots, works	lb.	.04⅝-	—
bgs. 500 1,999-lb lots, works	lb.	.07½-	—
Zircon (G) in barrels 1c higher			
Zirconium acetate soln 13% ZrO_2, dms c.l. 30,000 lbs min., works	lb.	.23	—
Zirconium hydride powd electronic grade dms works	lb.	14.00	15.00
Zirconium oxide, CP white grd., bbls or bgs works	lb.	1.50	—
Electric-fused lump bgs 500 to 1,999-lb lots works	lb.	48½-	—
bgs. smaller lots works	lb.	.51	—
milled bgs c.l. works	lb.	.62	—
bgs. 5-ton lots, works	lb.	.62½-	—
bgs. 1 ton to 9,999-lb lots, works	lb.	.63½-	—
bgs. 500 to 1,999-lb lots, works	lb.	.64	—
bgs. smaller lots works	lb.	.66 -	—
Zirconium c...			
Glass polishing grade 94-97% ZrO_2 bgs works	lb.	.55	.65
Opacifier grade 85-90% ZrO_2 bgs.,	lb.	.27	.50
Stabilized oxide 91% ZrO_2, milled, bgs	lb.	.62	.85
Zirconium oxychloride, cryst. ctns., 5-ton lots, works	lb.	.37½-	—

French Chemicals

—*Continued from page 7*

market and was largely responsible for the export boost.

Value of French chemical production, tallied at 12.4 billion francs in 1958, is estimated by BDSA for 1959 at between 14 and 14.5 billion francs. This excludes 5 billion francs in sales chalked up by the rubber and glass industries.

As of the close of the year, France ranked third among European chemical producers and, according to an Organization for European Economic Cooperation study, accounted for 20 percent of Europe's chemical production.

Germany had 26 percent, the United Kingdom, 24 and Italy, 13. While these percentages were for 1958, they were not expected to change in '59, as the growth rate was approximately the same among the leading countries.

France remains the largest European producer of phosphatic fertilizers; the second in production of nitrogenous products, potash, calcium carbide and sodium carbonate and the third in production of chlorine, plastics, paints, and petrochemicals. Italy has the edge over it in sulfuric acid, synthetic dyes and pigments.

ACTH Lab Synthesis

—*Continued from page 3*

that they had managed to string together nineteen of the twenty-three amino acids.

Future significance of ACTH synthesis is:

- Removal of dependence on hogs and other animals for hormone supply.
- Gaining of understanding of how ACTH stimulates the adrenal gland to put out cortisone-like compounds.
- Synthesis of bigger and better proteins.

Insulin, for instance, contains fifty-one amino acids—less than twice as many as the newly-synthesized ACTH.

Pittsburgh's scientists report their material available in gram-lots for evaluation and testing.

Obituaries

J. Howell Healy

J. Howell Healy, former vice-president and sales director of McNeil Laboratories, Inc., Philadelphia, died November 24 in Rochester, N. Y. He was seventy-five years old.

Mr. Healy started his forty-five year career with McNeil Laboratories as a sales representative for its predecessor firm, Robert McNeill Company. In 1933, when the firm was incorporated under its present name, he was elected vice-president and sales director. He retired in 1955.

Edwin Nielsen, vice-president and a director of American Mineral Spirits Company, and a director of Mercaux Petroleum Company, died Nov. 29 in New Rochelle, N. Y. He was seventy-two years old.

James Tice Phillips, retired president of Pacific Chemical & Fertilizer Company, Honolulu, died Nov. 29 in San Francisco. He was seventy-three years old.

Lloyd E. Smith, president of Virginia Dare Extract Company, Brooklyn, N. Y., died November 30 in that city. He was sixty years old. Mr. Smith joined the company in 1924 and became president in 1951. He was a past president of the Flavoring Manufacturers Association of the United States.

Hugh R. Tennant, manager of Parke-Davis & Co.'s Seattle, Wash., branch office for the past thirteen years, died November 28 in that city. He was fifty-seven years old.

Air Reduction Units

—*Continued from page 5*

as president of the new division, will be the following officers: Vice-president-marketing, B. R. Krashin; vice-president-operating, R. T. Lund; vice-president, distribution, R. A. Speck; vice-president-engineering, J. M. Tinnon, and controller, F. E. Evers.

The sale of polyvinyl acetate emulsions will continue to be handled by the Colton polymers department. Vinyl monomers and other acetylene chemicals will be marketed by the organic chemicals department. Both departments will market "Vinol" polyvinyl alcohol.

C. J. McFarlin, president of Air Reduction Chemical Company, will join the corporate forward planning group.

Cosden Petroleum Forms Separate Chemical Dep't

Cosden Petroleum Corporation, Big Spring, Tex., has organized a chemical department to handle its increasing stake in the chemicals and plastic business. The department will be headed by Paul D. Meek, who has been with Cosden since 1955.

In a related move, the W. R. Grace & Co. subsidiary has reorganized its refining department and changed the name of the refining division to refining and chemical division.

W. M. Preston, who joined Cosden in September, has been appointed manager of polystyrene sales, and Lester L. Beauvais has been named manager of technical service for that product.

Maleic Unit Set in Belgium

Societe Chimique de Selzaete, Brussels, Belgium, is building a maleic anhydride plant at Selzaete. The plant, which is slated to go on stream at the beginning of 1962, uses a Scientific Design Company process and has a capacity of 5,000 metric tons per annum.

AIRCO
VINYL ACETATE MONOMER

at your plant ... when you need it

Save money with a dependable source of supply for high-purity vinyl acetate monomer. Air Reduction's fast deliveries allow you to time vinyl acetate purchases to your production schedule. No worries about contamination with Airco tank cars used only for vinyl acetate.

Order the quantity you need for current use. Phone it in. Orders from tank car to drum size get prompt shipment. Rapid tank truck shipments available also.

AT THE FRONTIERS OF PROGRESS YOU'LL FIND...

AIRCO

AIR REDUCTION CHEMICAL COMPANY

A division of Air Reduction Company, Incorporated
150 East 42nd Street, New York 17, N. Y., Phone MUrray Hill 2-6700
Represented Internationally by Airco Company International

Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

Founded October 18, 1871 by William O. Allison
Directed 1900-1942 by Harry J. Schnell
EDITOR AND PUBLISHER: William S. Auchincloss
ASSISTANT PUBLISHER: J. Stuart Auchincloss
MANAGING EDITOR: Arthur R. Kavaler
TECHNICAL EDITOR: Edwin M. Fisher
NEWS EDITOR: Gene Gasteiger
OPD SPECIAL REPORTS: Don L. Richards
MARKETS: Andrew C. Barchi, John L. Casey, Richard Consolas, James Gubitosi, Jacqueline Hudgins, Harvey McCormick, Harry Van
IMPORTS: Mary Van Grieff
CONSULTING EDITOR: Hugh Craig
WASHINGTON EDITOR: Ralph L. Cherry, 956 National Press Building, Washington 4, D.C.
EUROPEAN EDITOR: Clare M. Cotton, 26A Wellington Road, London NW 8, England
SCHNELL PUBLISHING COMPANY INC., 30 Church Street, New York 7, N. Y. (RE 2-9820) Cable Address: Reporter, New York
PRESIDENT: William S. Auchincloss
VICE-PRESIDENT: Jean Schnell Auchincloss
TREASURER: William S. Auchincloss
ASSISTANT TREASURER: Ruth D. Johnson
SECRETARY: Anne L. Koch
ASSISTANT SECRETARIES: J. Stuart Auchincloss, Sara Jane Auchincloss

Copyright 1960 by Schnell Publishing Company, Inc.
Member of Audit Bureau of Circulations

Volume 178 | December 5, 1960 | No. 24

A Mission Flops

Those who contend that this nation should have a properly purposed, properly designed, properly directed and properly equipped foreign ministry are finding—at least in their own minds—much to support their views in the flop of the US mission to West Germany, purposed to get that nation to contribute something toward the easing of the burden of this nation's financing of all sorts of doings popularly referred to as aid. Primarily that flop was an expectable consequence of the personal approach—pronouncements and procedures—of the missionaries. The failure was promoted more than a little by what, in the announcement, was certain to be regarded as a not exactly friendly demand. The staging did not have any tendency to change that view. And a stiff poke on the chin was delivered in the concurrent order by President Eisenhower that dependents of members of US forces abroad come home — and bring with them their purchasing participation in everyday business in the towns of their location.

It is noteworthy—and the US missionaries have duly noted it—that West Germany did agree to step up its activities in the aiding of under-developed peoples. There can at least be procedural, if not financial, cooperation in that connection.

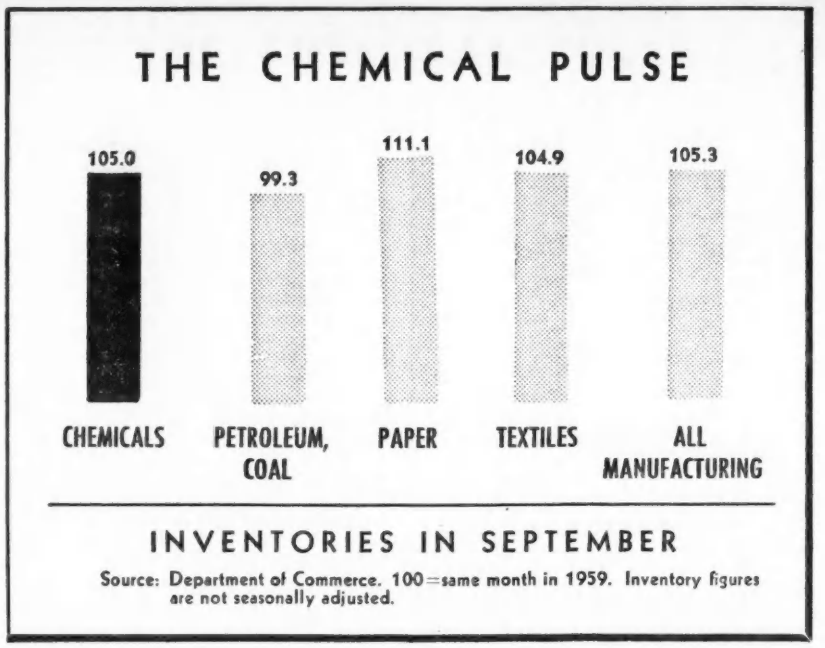
The dollar-saving mission did no better in France. But, it did get somewhere in Britain, where there was public criticism of the attitude of Germany. At least in some measure, the British response reflects the fact that this country has a better relationship there than it has on the European mainland—a relationship to which many things other than a common language contribute.

But, the plain lesson of the mission's flop is that this nation falls short of having what it should have in these changing times in the way of equipment for foreign affairs—including business cooperation.

Markets in Space

Perhaps, in a decade or two, man will have discovered whether there is a market in outer space for chemicals or other terrestrial materials. But, there is a vastly potential wide variety of markets right here on earth for chemicals and other materials which are imperatively needed as contributors toward the promotion of that discovery. So, there is much to be studied out of the article on space chemicals in OPD last week—whatever one may think about the appropriateness of the sixth word in the opening sentence.

Outer space is a very expansive area. Whether it is a populous one is quite another matter—which the space age may decide. Its potentialities as a market-place lie in fields of transportation rather than in those of consumption. That is why the US Air Force is puzzling over the development of lubricants for satellites and space vehicles, experimenting with such things as liquid potassium and liquid rubidium. It is also trying out gaseous lubricants and has reported "moderately successful application at temperatures as high as 1,500 degrees Fahrenheit. All of which points in the direction of those predicted bigger space markets for chemicals—even though nothing has been reported about any considerations being given to the good old plumbago of prairie schooner days.



Guide to the New Age

The National Association of Manufacturers has said that its sixty-fifth congress of industry, to be held in New York during the current week, offers a guide to the new age. As such guidance is most pressingly needed for understanding of what the new age is going to be and what to do about it, it is most earnestly to be urged that management will take adequate and appropriate advantage of its opportunity to be helped by way of contracts at the congress to become "more knowledgable and effective, both as executives and as citizens" in the "three stimulating days of food for thought, well spiced with inspiration and entertainment." Management is going to need such knowledge, whatever may be the nature, the location, or the scope of that new age. Its thinking must be directed primarily toward its role as citizens.

Some food for thought—and stimulation for action—as citizens will be provided for the congress of industry in addresses by members of governmental bodies who are concerned with what really is needed economically by this country and its people. They should be given a full measure of reciprocal advice from their audiences in a fundamental specific need for understanding and collaboration on the part of business and government to promote acceptance and application of the basic truth that the need is for national economy, not for political economy or commercial economy of itself, but certainly as an important necessary contributor to the overall condition.

Public hearings have been ordered for the current week by a joint congressional committee to analyze domestic and international economic trends expected to confront the next federal administration. Nine private and government economic experts have been summoned to testify, with a stated purpose of getting an "objective factual analysis of the various elements of strength and weakness affecting the current and the long-run economic outlook."

Because of the wide variety of guessing about what that outlook is, the contributions by the NAM congress and the congressional hearings can be of great economic value if they are made fully available soon to those who can—and will—make proper use of them. It would be most helpful as a guide to the new age to start the new year or the new administration with a suitable selective conference of business and political leaders who had made a thorough study of the findings of this week's two analytical gatherings and could, in their respective understandings of what they contributed to useful necessary knowledge construct and proceed to develop the teamwork which alone can construct and make adequately available the only assuredly successful guidance for the new age.

OPD'S BOOKSHELF

Radioisotopes

With this manual* as guide, together with some elementary equipment, such as a scaler, timer, Geiger tube and mount, the chemistry student can familiarize himself with radioisotope technics and glean some idea of their potential contribution to his future work. Prepared under contract with the Atomic Energy Commission, the book reflects the growing role of radioisotopes in chemical and biological laboratories, hospitals, industrial laboratories and scientific research centers. No previous radiochemical experience by either instructor or student is necessary for an understanding of the text. The students themselves prepare the samples, measure the radioactivity and interpret the results.

* RADIOISOTOPE EXPERIMENTS FOR THE CHEMISTRY CURRICULUM. 184 pages. Textbook, $2; Instructor's notes, $1. (A sample copy of the manual and notes is available to college or university teachers at no charge upon request to Nuclear-Chicago Corporation, 359 East Howard avenue, Des Plains, Ill. Multiple copies for student use may be purchased through Nuclear-Chicago or through the office of Technical Service, US Department of Commerce, Washington 25, D. C.)

Washington Talks It Over

Which Is It That Moves Across a State Boundary, the Finished Product or the Raw Material? That Is an Area of FDA Enforcement That Is Intriguing the Chemical Lawyers.

By Ralph L. Cherry
Washington Editor

Legal minds in the chemical and drug industries are taking another look into claimed authority of the Food & Drug Administration. What they are concerned about are the end-products of the food drug and cosmetic industries which may, never move across a state line.

Interest in this question has been aroused by the recent ruling of a Federal District Court in Syracuse, N. Y., which said that FDA has no right to seize a product as misbranded until the product has moved into interstate commerce.

The fact that the product may have been made up of ingredients that previously moved in interstate commerce is not of significant importance, the court said. What is the deciding factor is the disposition of the end-product.

The court's decision is raising all sorts of questions as to how far the FDA can go in its enforcement programs under the food additives and color additives laws because much of the agency's authority is grounded in the misbranding provisions of the basic statute—the federal food, drug and cosmetic act of 1938.

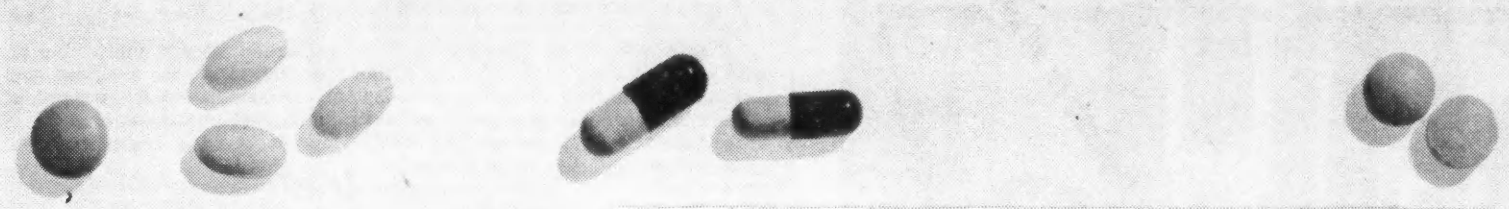
The issue is so important to the future enforcement work of FDA that the adverse ruling is being studied by the Department of Justice, at the urgent request of FDA, for appeal to the higher courts for a final decision. FDA says flatly that it is a test case.

The case involves a shipment of cooking oil labeled as containing 25 percent pure olive oil and seized on the charge that the product contained little or no olive oil. The government alleged that the oil was misbranded while held for sale after shipment in interstate commerce because it had been prepared by blending oils that had been shipped into New York from outside the state.

The claimant, A.M.S. Packing Company, New York, moved to dismiss on grounds that the seized goods were not in interstate commerce and thus not subject to federal law.

The court ruled for the claimant because the raw materials which moved in interstate commerce were legal at the time of movement and the finished and completed article alleged to be misbranded was manufactured and sold only within the state.

Judge James T. Foley stated: "I see no consequences here of gravity to the citizens of New York because New York has many statutes to reach the evil if it does exist in the labeling of the product. It is a good example where local government is able to act wisely and efficiently in the interests of its citizens and federal intrusion should be restrained."



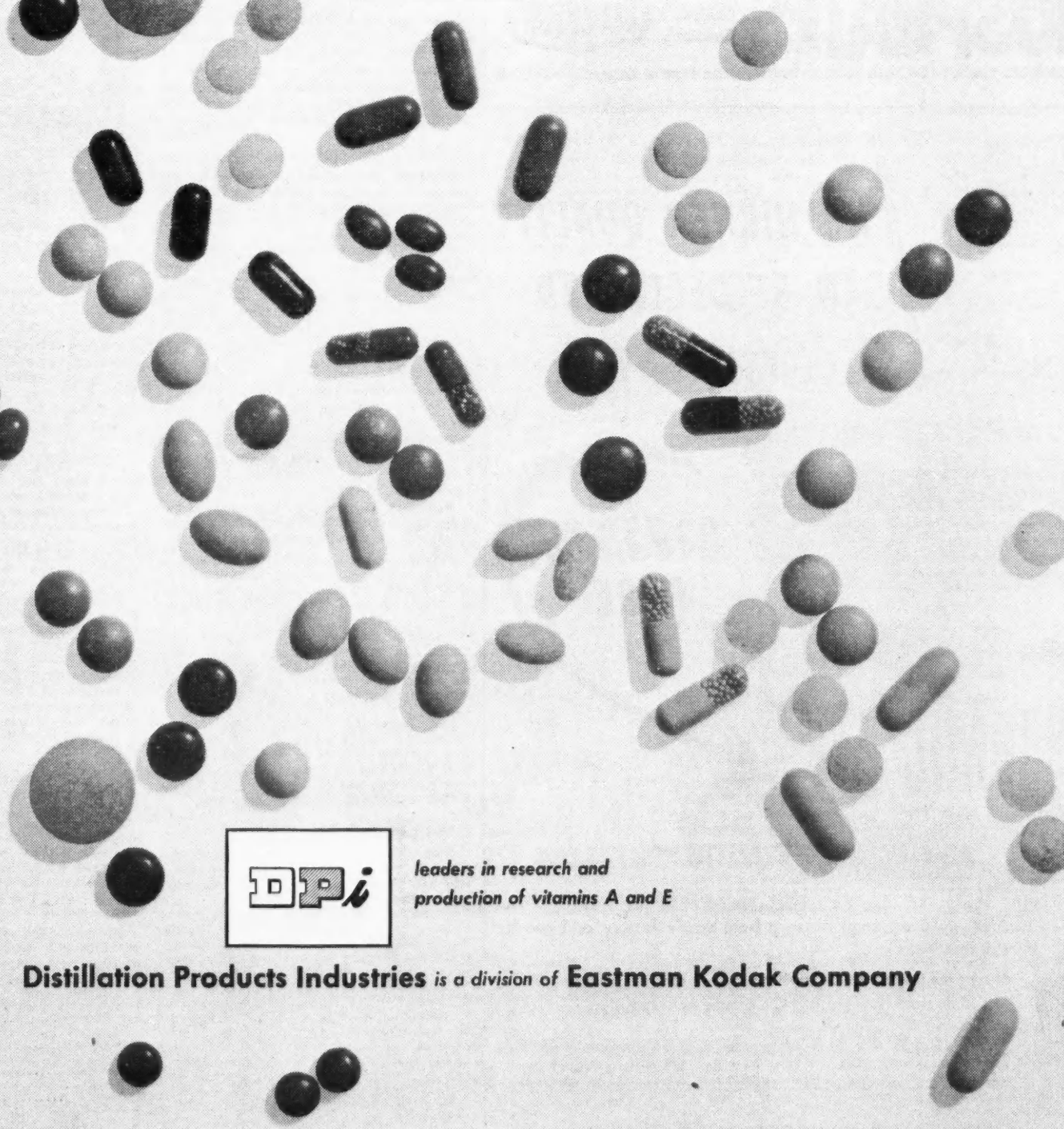
If yours aren't here, maybe they should be

Here are some of our customers' products. Ours you can't see, but it's there. The only way our *Myvax® Dry Vitamin A Palmitate* can get to market is in somebody else's bottle.

Our customers like this fine. They know it gives us time to concentrate on what we know best: vitamin A.

You'll like it, too. If you want help with vitamin A assays of your product, cooperation in stability tests, or a dissertation with slides on the relative biopotency of all-*trans* against 2-mono-*cis* and 2,6-di-*cis* isomers of vitamin A, call on us. We've been specializing in this sort of thing ever since we started the man-made vitamin A business in the forties.

We're equally ready to ship on short notice our liquid *Myvax Vitamin A Acetate* or *Palmitate*. For information and a quotation, write to ***Distillation Products Industries,*** Rochester 3, N. Y. Sales offices: New York and Chicago • W. M. Gillies, Inc., West Coast • Charles Albert Smith Limited, Montreal and Toronto.



DPi

leaders in research and production of vitamins A and E

Distillation Products Industries *is a division of* **Eastman Kodak Company**

essential chemicals for all industries

Caustic Soda • Soda Ash • Chlorine
Chrome Chemicals
Sodium Bicarbonate • Solvents
Hydrogen Peroxide
Calcium Chloride • Ammonia
Sulfur Chemicals
Titanium Tetrachloride
Barium Chemicals
Agricultural Chemicals • Caustic Potash
Muriatic Acid • Calcium Hypochlorite
Reinforcing Pigments

columbia | southern chemicals

COLUMBIA-SOUTHERN CHEMICAL CORPORATION
A Subsidiary of Pittsburgh Plate Glass Company
One Gateway Center, Pittsburgh 22, Pennsylvania

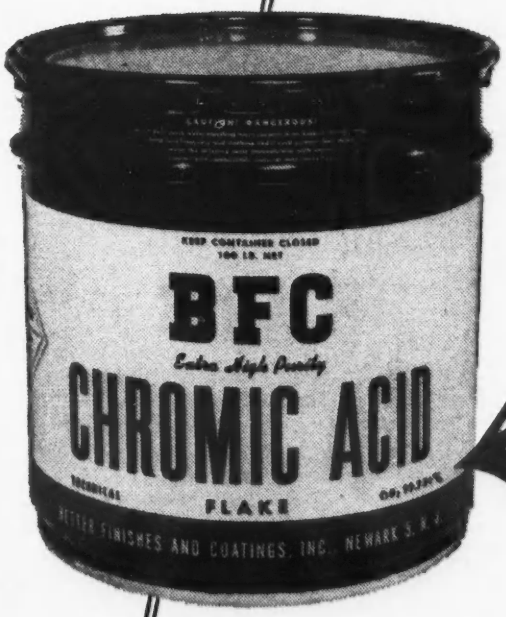
CLIP THIS AD TO LETTERHEAD FOR CATALOG OF SODIUM

PHOSPHATES and other Blockson Chemicals

BLOCKSON

BLOCKSON CHEMICAL COMPANY • Chemicals Division • Olin Mathieson Chemical Corporation • Joliet, Ill

NO HIGHER QUALITY CAN BE DELIVERED SO CONSISTENTLY...



99.75+% PURE

And you get prompt delivery from ample factory and nearby distributor stocks.

Next time you're in the market why not send us a modest order just to find out how good BFC Chromic Acid really is.

BETTER FINISHES & COATINGS, INC.
268 Doremus Avenue, Newark 5, N. J. • 2014 East 15th St., Los Angeles 21, Calif.

Heavy Chemicals

First a switch from granular to flake production, then a sharpening of the price axe for a deep (5¼ cents) cut, which went into effect one week ago, prelude what appears to be a fortissimo drive by zinc nitrate makers for a bigger share of such lush, expanding markets as textiles and steel phosphate cleaning. The flake grade is said to perform better in all outlets, and the new price level, one trade source said, can be expected to perform better with purchasing agents. Otherwise, it was an uneventful week in the heavy chemicals market.

Movement to the automobile industry had gathered to full tide, and as stocks of cars mounted and year's end approached, the chemical people feared at least a temporary surcease of solace from that quarter. Nevertheless, Detroit's platers had not yet turned off the chromic acid tap, as had appliance makers in the east.

Their Christmas shopping for raw materials done, the stores well stocked for the holidays, these manufacturers decided to coast until the business picture on the 1961 calendar will have clarified. So chromic acid makers in the area reported a downturn of sales.

Conversations with borax producers last week revealed that this fast-growing alkali has established itself as one of the most universally used chemicals in today's market with applications in widely divergent fields. A reference here to a refrigeration outlet, however, proved, regrettably, to be in error.

The American Paper and Pulp Association reported production for the week ended Nov. 26, at 84.4 percent of theoretical capacity, as compared with the revised figure of 90.1 percent for the previous week and 93.8 percent for the corresponding week of last year.

Price Trends

Advanced
None

Reduced
Zinc nitrate, flake, 5½c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 4, 1959
106.82	106.83	106.84	103.56

For Current Prices see Page 10

Acids

Chromic—Movement to platers in the automobile industry gathers to full tide, but the current level of new car stocks, one of the highest in history, gives cause for concern, trade sources say.

Along the eastern seaboard, where the bulk of chromic acid sales are to the appliance industry, business has fallen off considerably, and is headed for a year's end low ebb, as dealers and producers look toward the post-Christmas dearth of demand, these sources add.

Prices are steady, and supplies in fair balance, they note.

Hydrochloric—Despite a little slackening in some outlets, the overall sales picture is good, producers report.

Hydrofluoric—Fair call from the chemical industry underpins a market that would otherwise be flagging at the approach of year's end, observers say.

Nitric—A fair volume of material is being moved under the impetus of demand from industrial outlets, it's reported.

Sulfuric—Steel output was scheduled to rise last week, but not as much as it should with the resumption of full work schedules following the holiday downturn.

American Iron & Steel Institute estimated the week's output at 1,404,000 net tons, or 49.3 percent of capacity, as against an actual total for the previous week of 1,367,000 net tons, or 48 percent of capacity.

Output during the comparable week a month ago amounted to 1,478,00 net tons, the institute notes. A year ago, as the post strike buying binge moved into full swing, output was roaring along at 2,650,000 tons for the corresponding week.

Bases and Salts

Borax—A compact car producer's decision to use ceramic coatings on mufflers and tail pipe is illustrative of this market's steady overall growth.

Ceramics and fiber glass comprising about 25 to 30 percent of borax business, represent the largest and, to most observers, the fastest growing demand area. It includes a plethora of new applications in the home construction field and these developments in automobile technology.

Antifreeze, though a much smaller outlet percentagewise, accounts for a substantial volume of business at this time of the year, and the near frantic competition of the big chemical companies who have entered this market during the past couple of seasons, has helped maximize borax sales.

Makers of the alkali look forward to closing the year with a substantial sales gain over 1959, although they not a general slackening at this time that is not entirely seasonal. Automobile producers, faced with an uncomfortably large inventory of new cars, are pulling in their horns a little, it's reported, and other borax users have started to trim their stocks of raw materials earlier than usual.

Caustic Soda—At least one caustic soda producer must have regretted the closing down last fortnight of a major rayon installation.

It's estimated that about 15 percent of all caustic output moves into rayon production.

Pressure by nylon makers on the tire cord market has therefore become a problem for caustic soda producers as well as for the rayon people. It's thought to be one reason why prices of the alkali stood steady when chlorine advanced last spring. For nylon makers have spearheaded their advance into this market by several price cuts, and the rayon people could hardly have matched them had they been faced with higher costs of raw materials.

Copper Sulfate—Production of copper sulfate in the US in September totaled 5,900 tons, down 7 percent from August, the Mines Bureau reports. Shipments fell 23 percent to 4,740 tons, or 1,200 tons less than production, causing stocks to rise to 3,776 tons by month's end from 2,664 a month earlier.

Imports, Mines notes, totaled only 165 tons, all from Mexico, while exports reached 2,222 tons, as compared with 2,699 tons in August.

According to the Bureau's archives, domestic consumption over the past couple of years has been about evenly divided between agricultural and industrial outlets.

In 1957 and '58, exports were a big factor, but became only of minor importance in 1959 when domestic producers sharply slashed production. This year exports have been running at a brisker rate, though shy of the pre-1959 volume.

Lime—Sales of lime in the US in September totaled 979,885 short tons, a slight increase over August, the Bureau of Mines reports. Included were 745,776 tons of quicklime and 234,109 tons of hydrated material.

By end-uses, the sales figure breaks down to 10,296 tons of agricultural grade, 89,356 tons of construction material, 753,580 of chemical and other industrial grades, and 126,653 of dead-burned dolomite (refractory material).

Sodium Sulfate—One big rayon installation was locked up and sold last fortnight, thereby removing about 6,000 tons a year of byproduct sodium sulfate from the market.

The producer said that rayon operations would be consolidated at a remaining plant, but it was not indicated whether capacity would be increased at the unit to include that of the plant that had closed.

Trade sources point out that the rayon business has suffered deeply from what looks like a successful invasion by nylon makers into the multimillion dollar tire cord market.

Sulfur — The following figures compiled by the Bureau of Mines, show production and shipments of sulfur during specified periods:

	August	*September*
Native production	453,555	372,514
Shipments	438,423	427,300
Sales*	469,218	435,928
Stocks†	3,718,759	3,655,347
Recovered production	61,185	58,736
Shipments	61,865	55,156
Sales*	66,225	58,458
Stocks†	103,613	103,391

* Calculated from production and change in stocks during the period.

† Producers' stocks at mines or plants in transit, and in warehouse at end of period.

The following figures, compiled by the

Look to BECCO first for
Peroxygen Chemicals
Including
• Hydrogen Peroxide
• Peracetic Acid • Sodium Perborate
• Ammonium & Potassium Persulfates
• and other Peroxygen Chemicals
Write for list of free technical bulletins.
BECCO Chemical Division
Food Machinery and Chemical Corporation
161 East 42nd Street New York 17, New York

MANUFACTURERS OF
COPPER SULFATE
Republic Chemical Corp.
94 Beekman St., New York 38
Telephone REctor 2-9810

HEXACHLOROETHANE
AMERICAN FIRSTOLINE CORP.
855 AVENUE OF THE AMERICAS
NEW YORK 1, N. Y.
Phone: OXford 5-6556
Cable Address: FIRSTOLINE, N. Y. • TWX: NY1-2765

Heavy Chemicals

Bureau of Mines, show imports of Canadian and Mexican sulfur into the United States during specified periods in long tons.

	August	*September*
Ore	11,621	7,829
In any form	70,633	23,062
Total	82,254	30,891
Dollar Value		
Ore	$231,829	$154,013
In any form	1,464,351	484,861
Total	$1,696,180	$638,874

Zinc Nitrate—A steep (5½c. a pound) price cut for this material appears to have been concurred in by all members of the trade.

Producers a while ago switched from a granular to a flake grade. It's thought that was a first step in an overall move to stimulate a stronger market. The price cut was a logical second step, trade sources say.

Major applications for zinc nitrate lie in textiles, electro cleaners and steel phosphate cleaning. The flake grade is said to perform better than granular in all these outlets. There are competitive materials, and the 5½c. price cut is believed to strengthen the zinc compound's position.

Under the new schedule, 100-lb. polyethylene fiber drums are quoted at 16½c., drums in less than carlots are 14½c., and carlots 14c.

Nonferrous Metals

Lead—Business volume was rated fair for this time of the year. Price was unchanged.

Mercury—Quotations for large lots were maintained at the long-standing range of $209 to $212 a flask, prompt shipment.

Silver—For over a year the price has been unvaried at 91⅜c. a troy ounce, spot.

Tin—Straits metal held fast to its $1.03 price tag.

NaClO$_3$
Hooker Oldbury® brand sodium chlorate assays 99.8% pure.
Get it in the new, improved 100 and 450 pound steel drums ...open with one hand with a tug on a lever. Or in 80,000 or 100,000 pound specially lined tank cars.
Write for data sheet.
HOOKER CHEMICAL CORPORATION
812-1 FORTY-SEVENTH STREET, NIAGARA FALLS, NEW YORK
SALES OFFICES: BUFFALO CHICAGO DETROIT LOS ANGELES NEW YORK NIAGARA FALLS PHILADELPHIA TACOMA WORCESTER, MASS.
IN CANADA: HOOKER CHEMICALS LIMITED, NORTH VANCOUVER, B. C.
HOOKER CHEMICALS PLASTICS

INDUSTRIAL CHEMICALS
QUALITY in QUANTITY —at prices that are always competitive!
a new source for
DICYANDIAMIDE
Available for immediate delivery at all times .... from warehouse stocks, at attractive prices.
FOR METALS & PLATING
DEGREASING TRICHLORETHYLENE
NICKEL SULPHATE
NICKEL CHLORIDE
NICKEL CARBONATE
SODIUM CYANIDE
POTASSIUM CYANIDE
ZINC CYANIDE
COPPER CYANIDE
PERCHLORETHYLENE
CARBON TETRACHLORIDE
CADMIUM ANODES
ZINC ANODES
CHROMIC ACID
CADMIUM OXIDE
NICKEL ANODES
POTASSIUM NITRATE
in Carloads and less Carload Drums, Barrels, Bags
BOSTON 10, MASS.
PORTLAND, CONN.
PROVIDENCE 3, R. I.
PHILADELPHIA 6, PA.
BALTIMORE 1, MD.
CHICAGO 1, ILL.
Philipp Brothers Chemicals, Inc.
COLISEUM TOWER BUILDING
10 COLUMBUS CIRCLE · NEW YORK 19, N. Y. · JU 6-6020

DANGER

CAN BE ELIMINATED!

WITH AN

ECO CHEMICAL SAFETY FAUCET

Dispense hazardous solvents and corrosive fluids with an ECO stainless steel Chemical Safety Faucet — THE FACTORY MUTUAL APPROVED chemical safety faucet. Ideal for dispensing at sub-zero temperatures . . . and temperatures up to 450° F.

APPROVED FM FACTORY MUTUAL

ECO Chemical Safety Faucets are non-drip designed, spring-loaded and equipped with Teflon* seals to prevent seizure problems, which insures positive, dependable sealing for intermittent and long periods of time.

IMMEDIATE DELIVERY FROM STOCK

FREE CORROSION CONTROL BULLETIN

Write for Bulletin #CF1257 describing the patented ECO Chemical Safety Faucet. Also available is Bulletin #CF1157 "Corrosion data for stainless steel chemical faucets". Write today!

*Trade Mark of the E. I. Du Pont Co.

ECO the big name in small pumps

ENGINEERING CO.

12 NEW YORK AVENUE, NEWARK 1, N. J. MArket 4-6565

ALUM

CYANAMID

AMERICAN CYANAMID COMPANY

Process Chemicals Department

30 Rockefeller Plaza, New York 20, N. Y.

Metal & Thermit Opens New High Temperature Lab

A new high-temperature laboratory for inorganic chemical, ceramic, metal and mineral research has been opened at Rahway, N.J., by Metal & Thermit Corporation.

The facility complements the company's organic research and development center at Rahway, and an electrochemical/electroplating research and customer service center in Detroit, a spokesman notes.

For maximum flexibility the laboratories have been organized along functional rather than product lines. "As a result," the M&T spokesman says, "a wide variety of new projects can be undertaken quickly and relatively economically."

The firm is interested in processes that operate over a broad range of temperatures — from minus 60 to about 5,000 degrees Farhrenheit. Active research projects are extending these extremes even further, it is pointed out. The new facility is designed primarily for problems starting at 350 degrees Fahrenheit.

Roger Williams Sets Up Second European Office

Roger Williams Technical & Economic Services, Inc., has opened a new branch office in Geneva, Switzerland—its second in Europe and its fifth overall.

Headquartered in Princeton, N. J., the chemical market research organization also maintains offices in Toronto, London and New York. The Geneva office, which is located at 36 Rue du XXXI-Decembre, will be headed by M. Claude R. Tripet, a Swiss national who completed part of his science studies in this country.

Texaco Will Turn Tap

—*Continued from page 5*

be used captively in Texaco's recently-completed cumene plant.

With an on-stream target of second-quarter 1962, the company is looking beyond today's acute supply squeeze in making its marketing plans.

For the current shortage, being based on an unusually low operating rate in the steel industry, isn't expected to last. However, the US market has become dependent, even in normal times, on a heavy volume of imports—including some 44 million gallons a year from Soviet Russia alone. And this is where Texaco expects to find a breach a year and a half from now.

The plant's high-purity output, in the words of a Texaco spokesman, will help "to free domestic chemical companies from dependence on European and Iron Curtain sources."

Along with an integrated transportation system, the new plant facilities will include a "Unifiner" catalytic reforming unit, a "Udex" extraction unit and treating and fractionation machinery.

Look to BECCO first for

Ammonium Persulfate
Potassium Persulfate

as well as

- Hydrogen Peroxide
- Peracetic Acid
- Sodium Perborate
- and other Peroxygen Chemicals

Write for list of free technical bulletins.

BECCO Chemical Division

Food Machinery and Chemical Corporation

161 East 42nd Street, New York 17, New York

NEW SHIPPING CONVENIENCE

Smith-Douglass Granular POTASSIUM SILICOFLUORIDE IS NOW available in easy-to-store . . . easy-handling drums. Three production points (Norfolk, Va., Plant City, Fla., & Streator, Ill.) mean . . . better service . . . constant supply . . . . continual, uninterrupted shipments . . . 12 months a year.

KSF is NOW available in drums . . .

KAWECKI CHEMICAL CO.
220 E. 42nd St. NEW YORK 17, N. Y.
PHONE MUrray Hill 2-7143

EXCLUSIVE SALES AGENTS FOR:
SMITH-DOUGLASS Co., Inc.
Largest Producers of KSF in USA
5100 VIRGINIA BEACH BLVD.
NORFOLK, VIRGINIA

SMITH-DOUGLASS SD CHEMICALS

CAUSTIC SODA

Wyandotte produces many uniform grades of caustic — both liquid and anhydrous — and offers expert technical assistance in the selection, safe handling, and use of this material. Liquid grades (50% and 74%) are shipped in lined tank cars . . . anhydrous grades (solid, flake, crystal, and Flo-chilled*) in standard or open head non-returnable drums. *TRADEMARK

Check for full facts with your Wyandotte representative, or write us direct.

Wyandotte CHEMICALS
MICHIGAN ALKALI DIVISION

Wyandotte Chemicals Corporation, Wyandotte, Michigan • *Offices in principal cities*

STAUFFER PRODUCTS

AGRICULTURAL CHEMICALS DIVISION
Defoliants Fertilizers Fungicides
Grain Fumigants Herbicides
Insecticides and Miticides
Seed Disinfectants Soil Fumigants
Sulfurs, Ground and Refined

ANDERSON CHEMICAL DIVISION
Metal-Organics Metal Esters
Research Chemicals Metal Chlorides
Aluminum Acetyl Salicylate

CONSOLIDATED CHEMICAL INDUSTRIES DIVISION
Sulfuric Acid Alums Bone Charcoal
Bone Meal Muriatic Acid
Hydrogen Chloride Ferric Sulfate

INDUSTRIAL CHEMICALS DIVISION
Acids: Boric, Muriatic, Sulfuric and Tartaric Aluminum Sulfate
Bone Charcoal Bone Meal
Boron Oxide Carbon Disulfide
Caustic Soda Carbon Tetrachloride Chlorides of Aluminum, Antimony, Boron, Columbium, Silicon, Tantalum, Titanium and Zirconium Chlorine
Chloroform Cream of Tartar Ferric Sulfate
Greases Hydrogen Animal Glues
Hydrogen Chloride Mesyl Chloride
Methylene Chloride Oleum Perchlorethylene
Potassium Nitrate Rochelle Salt
Sodium Carbonate Sodium Hydrosulfide
Sodium Sulfate Sulfur Chlorides
Sulfurs: Refined, Flowers, Roll, Rubbermakers and Insoluble Crystex®

INTERNATIONAL DIVISION
Products of all Divisions

A. R. MAAS CHEMICAL DIVISION
Phosphoric Acid Phosphates
Photographic Chemicals Questex®

MOLDED PRODUCTS DIVISION
Battery Boxes and Fittings
Plastic Foam Plastic Pipe
Miscellaneous Molded Rubber and Plastic Products

NYOTEX CHEMICALS DIVISION
Hydrofluoric Acid, Anhydrous and Aqueous
Aluminum Chloride Aluminum Fluoride

STAUFFER-TEMESCAL COMPANY
Electron Beam Furnaces
High-purity refractory Metals and Alloys

VICTOR CHEMICAL WORKS DIVISION
Phosphoric Acid Phosphates of Ammonia, Calcium, Iron, Potassium and Sodium
Organophosphorus Compounds Chlorinated Trisodium Phosphate Phosphoric Anhydride
Phosphorus Chlorides Phosphorus Pentasulfide
Formic Acid and Formates Oxalic Acid and Oxalates Phosphatic Fertilizer Solution
Sodium Hypophosphite Methyl Parathion

WEST END CHEMICAL COMPANY DIVISION
Borax Lime Products Soda Ash
Sodium Sulfate

STAUFFER CHEMICAL COMPANY
380 Madison Avenue
New York 17, N.Y.

Chemico Gets Contract For Japanese Facilities

Chemical Construction Corporation, New York, will engineer a methanol plant and the first acetylene facility in Japan using the "BASF" process.

A contract for the two projects was awarded to Chemico last week by Kyowa Gas Kagaku Kogyo KK, subsidiary of Kyowa Hakko Company and Nippon Mining.

Using natural gas as raw material, a twenty-seven metric-tons-a-day acetylene facility will provide off-gas for 100 tons of methanol daily, employing Chemico's exclusive methanol process.

The new plant is expected to be completed at Niigata in mid-1962.

Mint Oils in Washington

—*Continued from page 7*

midwestern producers a blow from which they have not as yet recovered.

Mr. Tornow points out that peppermint oils produced in the US fall roughly into three classes of quality—the best coming from the midwest, the second best from the west coast of Oregon and the third best from Washington.

The oil from Washington is sold into competitive domestic markets or on the export market.

Because of higher temperatures, longer daylight hours and more intense light in the far northwest, oil yield per acre is more than twice that of midwest crops, Mr. Tornow said.

The time of harvest is critical with respect to oil composition and the ratios of the four major constituents which determine oil quality: menthol, menthone, menthone, methol acetate and menthofuran.

The determination of oil quality, aside from taste and smell, is best made by chromatographic methods, rather than simple optical rotation methods, Mr. Tornow concludes.

Freeport Starts Production

—*Continued from page 3*

plant. The technic was adopted successfully a few miles to the north at Freeport's now depleted Bay Ste. Elaine deposit.

Lake Pelto is the second mine which Freeport has opened this year. In June the company began commercial production at its Grand Isle project—reportedly the world's first off-shore sulfur mine, located seven miles out in the Gulf.

Welch, Holme & Clark Appoints

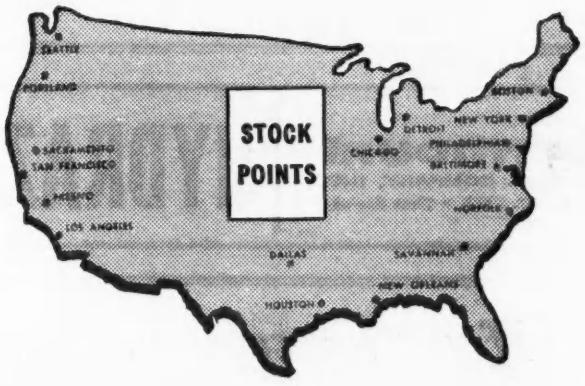
Welch, Holme & Clark Company, New York, has appointed Walter Dugan, vice-president, as general manager of the company. He was previously supervisor of the firm's Newark, N. J., warehouse.

SODIUM SULPHATE
Anhydrous

F. M. Ross & Co.
MUrray Hill 2-7136
155 E. 44th Street • New York 17, N. Y.
EXpress 2-2121
3930 Glenwood Drive • Charlotte, N. C.

Manufacturers of
Red and Black **COPPER OXIDE**
COPPER SCALE
ROBERT A. COUPE, 260 Rhode Island Ave., PAWTUCKET, R. I.
Telephone PAwtucket 3-4944

CMC



IMPERIAL CHEMICAL INDUSTRIES LIMITED

Ammonium Chloride, Grey and White • Ammonium Bicarbonate USP • Ammonium Carbonate • Bleaching Powder Tropical 34%-36% Cl_2 • Calcium Formate • Chlorinated Rubber • Copper Cyanide • Potassium Cyanide • Sodium Cyanide, all grades • Zinc Cyanide • Sodium Aluminate • Sodium Bicarbonate USP and Tech. • Sodium Carbonate Monohydrate • Sodium Perborate • Trichlorethylene, all grades • Urea, 46% Tech. • 3,5,5 Trimethyl Hexanol • 2:4 Dimethyl 6-Tertiary Butyl Phenol • Hexachloroethane

PETER SPENCE & SONS LIMITED

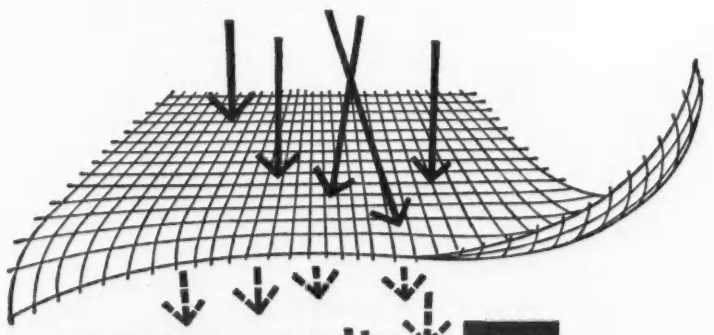
Aluminum Sulphate, Iron Free • Ammonia Alum • Butyl Titanate • Potassium Alum • Titanium Potassium Oxylate • Cobalt Molybdenum Catalysts

DEEPWATER CHEMICAL CO., LIMITED

Iodine, Resublimed USP and Reagent * Potassium Iodide, USP and Reagent * Potassium Iodate, USP and Reagent * Special Potassium Iodide Mixtures * Cuprous Iodide, Tech. * Sodium Iodide

LCL quantities available from Distributor Stocks in your area. This is only a partial listing of the items we offer. Write for complete product listings.

CHEMICAL MANUFACTURING CO., INC.
444 Madison Ave. • New York 22, N. Y.
714 West Olympic Blvd. Los Angeles 15, Calif.
114 Sansome Street San Francisco 4, Calif.



an eye on purity

In every instance where Zinc Dust is used in the chemical industry — in making paints or bleaches, as a reducing or precipitating agent, as a purifier, or as a catalyst — your eye on purity can relax when you rely on Zinc Dust from General Smelting.

General is noted for meeting any rigid specification no matter what micron size you specify.

Purity is General's watchword of quality in your specifications for Zinc Dust, or in the two stocked standard grades . . .

General #1—(97.0-97.0)—
97% metallic zinc
97% passes through 325 mesh screen.

General #2—(93.0 to 95.0 metallic zinc)—
50% maximum passes through 325 mesh screen.

Whenever you require the purest zinc dust for any chemical purpose, you'll find it pays to order purity from GENERAL.

GENERAL SMELTING CO.
2907 E. WESTMORELAND STREET / PHILADELPHIA 34, PENNA.
General Smelting Company of Canada, Ltd., Hamilton, Ontario

Precipitated Calcium Carbonate

U. S. P. and Technical Grade

MISSISSIPPI LIME COMPANY
Alton, Illinois

PASCO PASCO PASCO PASCO PASCO PASCO PASCO PASCO PASCO PASCO

Producers & Marketers of Crude Sulphur

... with mining operations in Jaltipan, Veracruz, Mexico, and principal offices in Houston.

Pan American SULPHUR COMPANY

609 BANK OF THE SOUTHWEST BUILDING HOUSTON, TEXAS

Fairmount CHEMICAL COMPANY, INC.
135 Liberty St., N.Y. 6, N.Y. • Plant: Newark, N.J.

HYDRAZINE

If you use copper sulfate

specify...

Triangle Brand Copper Sulfate

Its 99% purity, standard uniformity and dependable quality make it desirable for many uses.

in wood preservatives
as a superior and inexpensive ingredient that helps prevent decay and termite damage.

in refining
as a reagent for oil sweetening and catalyst in high octane gasoline production.

in plating
as an electrolyte for copper-plating and for coloring metals.

in water treatment
as an algae destroyer, and as an eliminator of roots and fungus growths in sanitary sewers and storm drains.

in agricultural chemicals
as the active agent in Bordeaux sprays and dusts that control plant diseases, and as a soil revitalizer for copper deficient soils.

in textiles
as a fixing agent in textile dyeing and calico printing.

in chemical formulas
as raw material to make chemicals and copper compounds.

in mining
as a flotation reagent in the milling of lead and zinc ores.

in paints
as a starting material for making green and blue pigments.

For information on how Triangle Brand Copper Sulfate can be applied to your operation, write:

Phelps Dodge Refining Corporation
300 PARK AVENUE, NEW YORK 22, NEW YORK

Gulf Nearing Finish Line On New Oxo Alcohol Facility

Gulf Oil Corporation's multi-million dollar oxo alcohol unit is now nearing completion, according to Badger Manufacturing Company, the Cambridge, Mass., engineering and construction contractor.

The new unit, said to be one of the largest of its type ever built and the first major petrochemical unit at Gulf's Philadelphia refinery, will use heptene and nonene as raw materials for production of octyl and decyl alcohols. The products will be marketed as plasticizers for vinyl products, and for use in detergents, synthetic lubricants, weed killers, surfactants and other alcohol-based products.

The high pressure process employed by the unit to produce the oxo alcohols is based on research carried out by Gulf over the last ten years. The large quantities of carbon monoxide and hydrogen required by the process will be generated by separate units which have been designed by Badger.

Food Additives Batches

—Continued from page 5

to submit scientific information that will determine FDA's final judgment..

FDA has granted the extension on a determination that no undue risk to the public health is involved and that the manufacturers need the extra time to gather necessary information and evidence.

The first batch, numbering seven chemicals, consists of direct additives, while the second list, also numbering seven, is comprised of materials that are applied indirectly.

In a related action, FDA reacted favorably last week to a petition by Nopco Chemical Company for clearance of "Polysorbate 80" as a food additive.

The chemical (polyoxyethylene 20 sorbitan monooleate) was cleared for use in ice cream, frozen custard, ice milk and fruit sherbet as an emuulsifier either alone or in combination with polyoxyethylene (20) sorbitan tristearate. Maximum amount of the additives, alone or in combination, was set at 1,000 parts per million. A tolerance was also set for use in yeast defoamer formulations, and labelling regulations were set forth.

This order becomes effective with publication in the *Federal Register* but interested parties have thirty days to file objections to it.

Following is the list of direct chemical additives that have received time extensions, showing the limits in amount that may be used (when prescribed) and the specified uses or restrictions:

Dimethylpolysiloxane, as a constituent of defoamers used in spray adjuvants on fruits and vegetables.

Disodium ethylenediamine tetraacetate, 15 parts per part of vitamin B_{12}, as an aid in stabilizing vitamin B_{12} in aqueous multivitamin solutions.

Kerosene, deodorized, 1 part per million residual, as a constituent of spray adjuvants used on fruits and vegetables.

Nonylphenoxy polyethyleneoxy ethanol (9.5 mols ethylene oxide); petroleum sulfonate (containing 50 percent mineral oils and 50 percent sulfonated petroleum oil of molecular weight 392); polyglyceryl phthalate ester of coconut oil fatty acids diluted with ethylene dichloride, all 1 part per million residual, the first two are constituents of spray adjuvants used on fruits and vegetables, and the latter as the spray adjuvant itself.

1,1,1-trichloroethane, as a constituent of defoamers used in spray adjuvants on fruits and vegetables.

Listed below are the indirective additives with the specified uses or restrictions: (No limits have been set).

Ethylenediamine tetraacetic acid, tetrasodium salt of; ethylene glycol monobutyl ether, both in felt cleaning compounds used in the manufacture of paper and paperboard products.

Polyamide resin obtained by condensation of dimerized vegetable fatty acids and ethylene diamine, molecular weight 6,000-9,000; polyoxyethylated nonylphenol (9-10 mols ethylene oxide), both as components of food packaging material.

Polyoxyethylene-polyoxypropylene glycol block polymer, molecular weight 2,000, in manufacture of paper and paperboard.

Sodium dodecylbenzene sulfonate; sodium salt of naphthalene sulfonic acid condensed with formaldehyde, both in felt-cleaning compounds used in the manufacture of paper and paperboard.

Mercury Metal

- *Prime Virgin*
- *Redistilled*
- *Reagent*

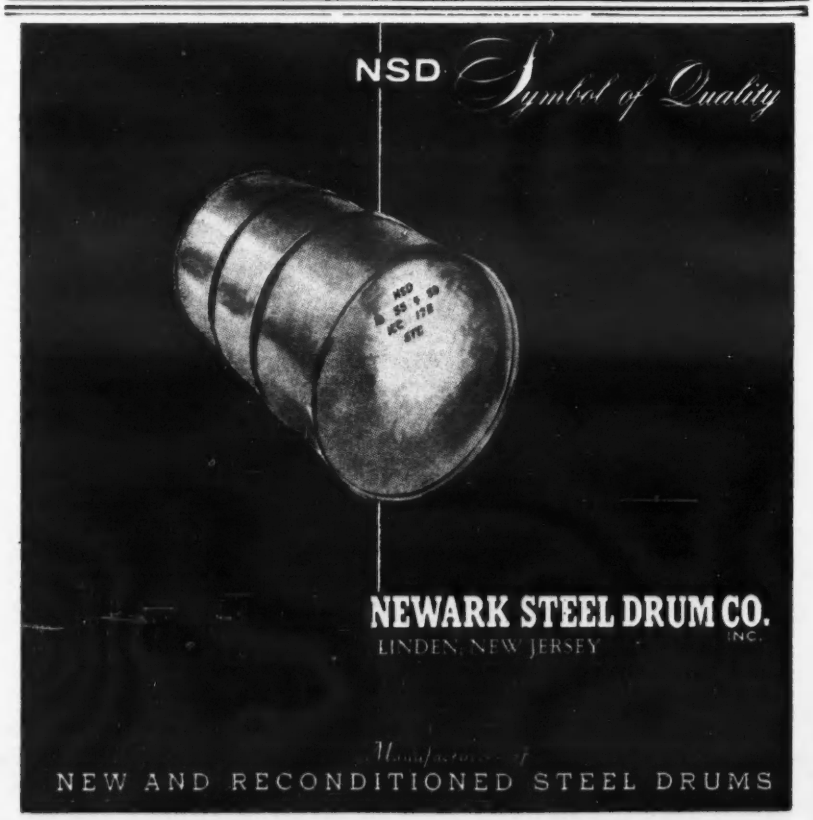
Mercurials

- *Calomel*
- *Corrosive Sublimate*
- *Red Oxide*
- *Yellow Oxide*
- *Organic Mercurials*

WOOD RIDGE CHEMICAL CORPORATION
50 PARK PLACE EAST
WOOD-RIDGE, NEW JERSEY
WEBSTER 9-4600 (N. J.)
CHICKERING 4-7892 (N. Y.)
(Successor to F. W. Berk & Company, Inc.

CUPROUS CHLORIDE

HENRY BOWER CHEMICAL MFG. CO.
30TH AND GRAYS FERRY RD. PHILADELPHIA 46, PENNA.



PLANT MANAGER: Robert H. Darling, named to run the Port Neches, Tex., plant of Jefferson Chemical Company.

,000

BULK NITRIC ACID DELIVERY IN 1,000-GALLON LOTS AVAILABLE...

Bulk nitric acid in shipments down to 1,000 gallons is good news for managers and purchasing agents in the Middle Atlantic area. Even better news is the fact that this comes with *24-hour service.* A few extra hours to Pittsburgh or Boston. Call us at BRyant 9-8069, or SWarthmore 6-4850, Leliarts Lane, East Paterson, N.J.

chemicals Laplace
by L.J.&M.

Fatty Acid Output Advances; Falls Shy of Year-Ago Level

October production of fatty acids, as classified under categories 1 to 12, totaled 39.4 million pounds, up 0.7 million pounds from September, but down 6.1 million from October 1959, the Fatty Acid Producers' Council reports.

Output of tall oil fatty acids as defined by category 13 (2 to 6 percent acids, over 90 percent fatty acids) was 7.8 million pounds, as against 7.3 million in September.

Disposition of all fatty acids, excluding category 13, amounted to 43 million pounds, as compared with 42 million (revised) in September and 45.1 million in October a year ago. For category 13, disposition totaled 9.3 million pounds. This made for an overall October total of 52.3 million pounds versus 49 million the previous month.

Finished goods inventories for categories 1 to 12 were 45.2 million pounds on October 31, down 1.7 million pounds from the September 30 level. Work-in-process stocks, as a total for all categories, was 21.3 million pounds, up 0.6 million from the end of September.

Molybdenum Lode

—Continued from page 7

space and missile programs. Overall Free World consumption in 1959 was estimated at 60 million pounds.

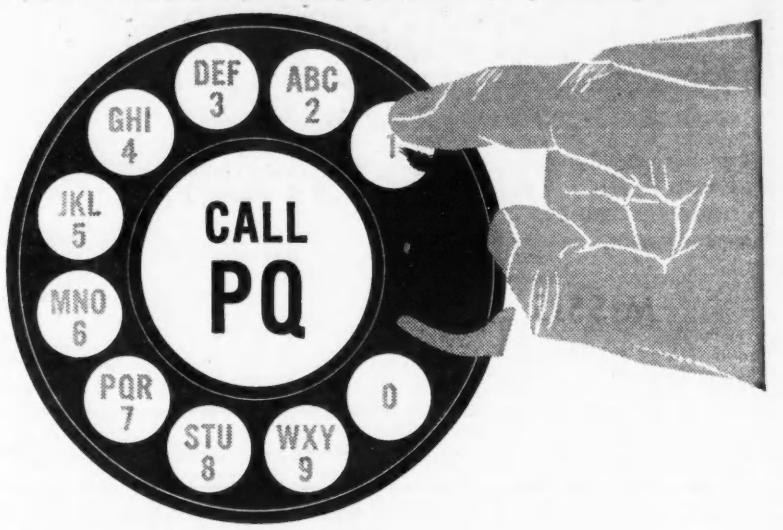
From June 15, 1957, to June 30, 1960, exploration work at the Questa property was carried out under financial assistance available from the Defense Minerals Exploration Administration. The DMEA program aims at encouraging exploration for new sources of strategically important materials.

In a final report prepared for the government by company engineers, the ore body was calculated at 260 million tons containing about 5 pounds of molybdenum disulfide per ton, which works out to approximately 760 million pounds of contained molybdenum.

Additional work conducted by the company since June 30 has extended the area of mineralization and disclosed substantial zones of higher mineral content both within and outside the area explored under the government program, the company reports.

Molybdenum is used in iron and steel alloys to impart added strength. More recently, its high melting point, exceptional thermal-shock resistance, good electrical conductivity and resistance to corrosion have opened up a new career in electrical, electronic and nuclear outlets important to the nation's defense program.

FOR YOUR NEXT SILICATE DELIVERY...



For a sample, a trial shipment or regular supply, you can be sure when it's PQ.

PQ produces more than fifty liquid silicates (25 dry form). Nothing more complete anywhere.

PQ's deliveries from nine plants east of the Rockies (associates Phila. Quartz Co. of Calif.—Berkeley & Los Angeles, Calif.; Tacoma, Wash.; National Silicates Limited, Toronto and Valleyfield, Canada), or less truckloads from distributors' stocks in over 80 cities.

PQ know-how is available to help you from a century's experience in silicate manufacture and use.

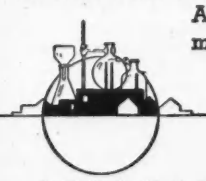
For silicates, contact PQ Headquarters (telephone MArket 7-7200).

PHILADELPHIA QUARTZ COMPANY
1133 Public Ledger Building, Philadelphia 6, Pennsylvania

PQ SOLUBLE SILICATES

PQ PLANTS: ANDERSON, IND.; BALTIMORE, MD.; BUFFALO, N. Y.; CHESTER, PA.; JEFFERSONVILLE, IND.; KANSAS CITY, KAN.; RAHWAY, N. J.; ST. LOUIS, MO.; UTICA, ILL.

SPECIAL AMMONIUM COMPOUNDS SUCH AS:
AMMONIUM PHOSPHOMOLYBDATE, Purified
AMMONIUM HYPOPHOSPHITE, N.F. VII
Are among 71 ammonium compounds manufactured by —



HEICO, INC.
QUALITY THROUGH RESEARCH
STROUDSBURG • PENNSYLVANIA

Caustic Potash, All Grades
Copper Sulphate

Glycerine C.P., U.S.P.
Chloroform, Tech. & U.S.P.

J.F.HENRY CHEMICAL CO., Inc.
4 Station Square, Rutherford, N. J.
N. J.: WEbster 9-7100 • N. Y.: BRyant 9-7283

If you use . . .

SODIUM FLUORIDE

And want . . .
Top quality, personalized service, fast delivery

It pays to call on . . .

BERKSHIRE CHEMICALS, Inc.
630 Third Ave., New York 17, N.Y. Telephone: YUkon 6-8855

SALES OFFICES: New York • Chicago • Philadelphia • Cleveland • Boston • San Francisco

Only Procter & Gamble supplies GLYCERINE from 9 plants across America!

Producing a steadily increasing supply of natural GLYCERINE to fill your needs.

FOR INFORMATION WRITE:
Procter & Gamble, Cincinnati 1, Ohio
or 640 Fifth Avenue, N. Y. 19, N. Y.

LEVER BROTHERS COMPANY
Producers and Refiners of
NATURAL GLYCERINE
390 Park Avenue New York 22, N. Y.

RANEY CATALYST CO., INC.
Originators and Dependable Suppliers of
RANEY CATALYSTS
1322 Hamilton National Bank Bldg.
Chattanooga 2, Tenn.
Since 1925 Phone: Amherst 6-8616, Taylor 1-7823 Cable Address: RANI

SORRY, JARVIS, BUT EVEN WITH TRACK SHOES
YOU CAN'T MATCH SPENCER SERVICE — IT'S WONDERFUL!

NEED METHANOL?...

For immediate, fast delivery of synthetic methanol, contact your nearest Spencer Chemical Company sales office. You'll learn for yourself that there's no secret why so many people say Spencer delivery service is *wonderful*. Next time you need synthetic methanol, specify Spencer.

SPENCER
"Tanky"...The Symbol of Spencer Service

SPENCER CHEMICAL COMPANY
America's Growing Name in Chemicals
SPENCER PRODUCTS: Ammonia (Commercial, Refrigeration and Metal Treating Grades) • Aqua Ammonia • 83% Ammonium Nitrate Solution • Prilled Ammonium Nitrate • Argon • Methanol • Formaldehyde • Liquid CO_2 • Nitric Acid • Uranium Nuclear Fuels
GENERAL OFFICES: Dwight Bldg., Kansas City 5, Missouri
DISTRICT SALES OFFICES: 575 Lexington Avenue, New York City; First National Bank Bldg., Chicago, Illinois

Aliphatic Organics

Organic chemicals production was generally lower in September; of the sixteen major-league, market-barometer chemicals reported by the Tariff Commission, output of only five (acetone, acetic anhydride, carbon tetrachloride, methanol, and trichloroethylene) rose above the August level but in no instance was the gain particularly outstanding percentagewise. Nor, for that matter, were the declines with three possible exceptions. Butadiene was off 24 million pounds, and acrylonitrile and propylene glycol 3 million pounds apiece.

Even if the downtrend persisted through October and November—barring, of course, really sharp cutbacks—1960 production of most of the chemicals on the Tariff Commission list probably will better the 1959 record. Excepting ethyl acetate and carbon disulfide, output in the first half of this year was higher than in the comparable period last, with several chemicals racking up impressive gains. To cite a few examples: acetic acid, up 19 percent; butadiene, 18; synthetic methanol, 13; and ethylene glycol, 11.

The Commerce department's Business & Defense Services Administration notes also that production of ethanolamines increased to 62,276,000 pounds during the first half of '60 from 58,507,000 in the same period in '59—a testimonial to the swift-flowing liquid detergents — while hexamethylenetetramine, a derivative of formaldehyde used in the manufacture and curing of phenolic resins, rose slightly to 13,588,000 pounds from 12,884,000.

South of the border, plans have been announced for the construction of facilities to turn out "Freon" fluorohydrocarbons, and a requisite raw material, carbon tetrachloride. Completion of the $1.2 million project, a joint US-Mexican venture, is expected by mid-1961.

Molasses prices at both New York and New Orleans have been strengthening weekly, despite limited current trading. The uptrend may be explained by distributor concern over availability of Cuban supplies in 1961, Agricultural Marketing Service says.

Acetic Acid—After hitting a high of 69 million pounds in July, US production of synthetic acetic acid dropped to 62.2 million the following month, and thence to 58.5 million in September. This, however, was still higher than April output of 57.8 million pounds, the low figure for the nine-month period, though it compares unfavorably with September 1959 output of 59.1 million pounds.

Whether, in fact, a downtrend is in progress, won't be clear until statistics are available for October and November when a slowdown in demand was reported in other segments of the organic chemicals market. The decline in September could, of course, reflect a sizable carryover of inventory from preceding months, a situation that could have been righted, thus requiring no further cutbacks.

It's likely, however, that output of acetic acid for all of 1960 will be higher than in 1959. For the first six months, according to Commerce department reckoning, production was up 19 percent from the comparable period a year ago.

Imports of acetic acid were 70,640 pounds in September, 109,800 in August. Displaying the opposite trend, imports of acetic anhydride rose from 13,300 pounds in August to 151,570 in September.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 4, 1959
130.70	130.70	130.68	132.95

For Current Prices see page 10

Canada is the usual foreign source of these materials.

Domestic production of acetic anhydride, as the table below reveals, also rose in September.

Acetone — Several problems confront acetone producers. The least of them is demand, which, without setting any records, has been fairly well maintained this fall considering the general slowdown in consuming outlets.

Causing concern, however, are low prices—and the resulting narrow profit margin—and the big capacity build-up. What's more, the situation will be difficult to put to rights.

Keeping the rein on prices is the increased availability of acetone as a by-product of the cumene process for producing phenol as well as the fully ample supply available from the basic isopropanol oxidation process. In addition, freight rates have been increased only recently and this will be an added burden on producers, some of whom consider the current 8c. a pound tankcar delivered quote too low to be profitable. Competition will probably rule out a January 1 increase, however, especially if business doesn't improve markedly.

Butadiene—The Bureau of Labor Statistics of the US Department of Labor says competitive price cuts in butadiene were responsible for the decline in the wholesale price index for chemicals and allied products in October.

The October index was 110.2, compared with 110.4 (revised) in September, and 110.0 in October 1959.

At last report, butadiene was selling here at 12¾c. a pound in tankcars. Previous listing was 14c.

Carbon Disulfide — Carbon disulfide's close link with the ailing rayon market took a toll on prices of the chemical earlier this year and probably explains the cutback in production in September as well as the generally lower output during the first half of 1960.

Statistics issued by the Textile Economics Bureau, Inc., show that September shipments of high-strength rayon yarn fell 30 percent to 18.6 million pounds from 26.6 million pounds a year earlier. This also represented a 10 percent decline from August.

In the first nine months of '60, deliveries of high-strength rayon yarn, practically all of which goes into tires, totaled 200.8 million pounds, off 20 percent from the like 1959 period.

Beginning with November shipments, rayon tire cord prices were from ½c. to 1½c. a pound higher than previously, but this indicated only that rayon pro-

Organic Chemicals Output: September

The following figures, in pounds, represent output of specified organic chemicals in August and September, 1960, as reported by the Tariff Commission.

	September	*August*
Acetic Acid:		
Synthetic	58,550,306	62,211,220
Natural (wood distillation)	1,778,000	2,024,000
Acetic anhydride	85,665,366	82,410,044
Acetone	67,224,659	63,628,254
Acrylonitrile	14,305,980	17,714,121
1,3 Butadiene (rubber grade)	147,014,542	171,579,645
Carbon disulfide	39,450,207	42,414,035
Carbon tetrachloride	31,343,740	30,925,314
Ethanolamines (Mono-, di-, and tri)	9,256,843	11,101,486
Ethyl acetate (85 percent)	7,810,239	8,232,314
Ethylene glycol	115,626,561	121,498,759
Formaldehyde (37 percent by weight)	142,755,075	148,281,547
Methanol:		
Synthetic	175,976,035	173,187,614
Natural (wood distillation)	909,680	1,035,840
Pentaerythritol	5,602,488	5,730,012
Perchloroethylene	16,082,834	16,280,066
Propylene glycol	9,140,111	12,070,585
Trichloroethylene	29,049,305	26,023,922

ACRYLATE MONOMERS

Methyl Acrylate
Ethyl Acrylate
Butyl Acrylate
2-Ethylhexyl Acrylate

In addition, Rohm & Haas supplies Methyl Methacrylate plus seven other methacrylates, as well as Acrylic Acid and Methacrylic Acid.

For technical information, prices, and samples, write Department SP-27.

Chemicals for Industry
ROHM & HAAS COMPANY
WASHINGTON SQUARE
PHILADELPHIA 5, PA.

Aliphatic Organics

ducers were desirous of a more profitable operation. Actually, nylon continues to make inroads, with makers claiming substantial gains in the auto replacement and truck tire markets this year, reportedly crossing the 50 percent mark in both markets for the first time.

Rayon, of course, has the original equipment passenger tire market sewed up for '61, but their competitors predict a breakthrough in this market by 1962.

Carbon Tetrachloride—A newly-formed firm in Mexico is set to construct facilities there for the manufacture of carbon tetrachloride and "Freon" fluorinated hydrocarbons for refrigerants, aerosol propellants, solvents and fire extinguishing agents.

Participating in the venture are two major US chemical firms, one of which will contribute 25 percent of needed capital as well as its "Freon" trademarks, know-how and technical assistance. The Mexican affiliate of the other US firm, together with Mexican investors, will put up the remaining 75 percent of the estimated $1.2 million required.

The carbon tetrachloride plant is to have an annual capacity of 4 million pounds per year, the "Freon" plant a capacity of 3 million pounds. Both facilities are expected to be on stream by mid-1961.

...ne manufacture of fluorohydrocarbons, with the increasing acceptance of aerosol packaging, is a steadily expanding market for carbon tetrachloride.

Glycerine—Demand for crude glycerine is slow. New interest in foreign material, currently quoted at 15c. a pound c.i.f., is reported almost non-existent with current imports seen as shipments against outstanding contracts.

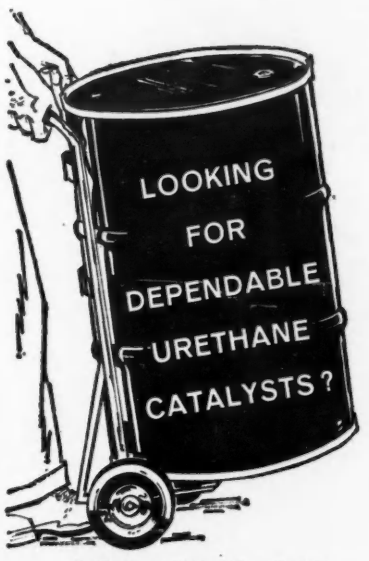
Domestic crude is selling at 17c. to 18.70c. a pound, depending upon grade, but refiners are nonetheless not particularly interested, one reason being the lack of strong demand for the refined product.

CHLORINATED SOLVENTS

Perchlorethylene • Methylene Chloride
Trichlorethylene • Carbon Tetrachloride

IMPORTED FROM WESTERN EUROPE • BULK STOCKS AT ELIZABETH, N. J.

INTERNATIONAL PETROSOLVENTS, INC.
390 Park Avenue, New York 22, N.Y.
Tel: PLaza 2-2260



TRY JEFFERSON

N-METHYLMORPHOLINE
N-ETHYLMORPHOLINE

These alkyl morpholines are as old as the urethane industry and have proved their performance dependability as catalysts in polyurethane foams. Other interesting applications are extraction solvents and stabilization agents for chlorinated hydrocarbons. These materials are also suggested for use in the preparation of self-polishing waxes, oil emulsions, corrosion inhibitors, and pharmaceuticals.

Immediate shipments are available from inventory in 55-gallon steel drums, 420 pounds net weight. For detailed information or samples of these alkyl morpholines contact your nearest Jefferson representative or write directly to Jefferson Chemical Company, Inc., 1121 Walker Avenue, P. O. Box 303, Houston 1, Texas.

JEFFERSON CHEMICALS

HOUSTON • NEW YORK • CHICAGO
CLEVELAND • CHARLOTTE • LOS ANGELES

Mathieson Propylene Glycol

is good quality

U.S.P. or industrial grades. Need any? Give us a call.

Olin Mathieson

Chemicals Division
745 Fifth Avenue, N. Y. 22

TENNANT

Ethyl Iodide • Methyl Iodide
Hydriodic Acid
Organic HI Salts

Confidential Custom Chemical Production and Service

TENNANT CHEMICAL DIVISION
Tennant Development Corporation
100 Park Avenue
New York 17, N. Y.
ORegon 9-1300

WHEN YOU NEED

LACTIC ACID!

Call **AMERICAN MAIZE PRODUCTS COMPANY**

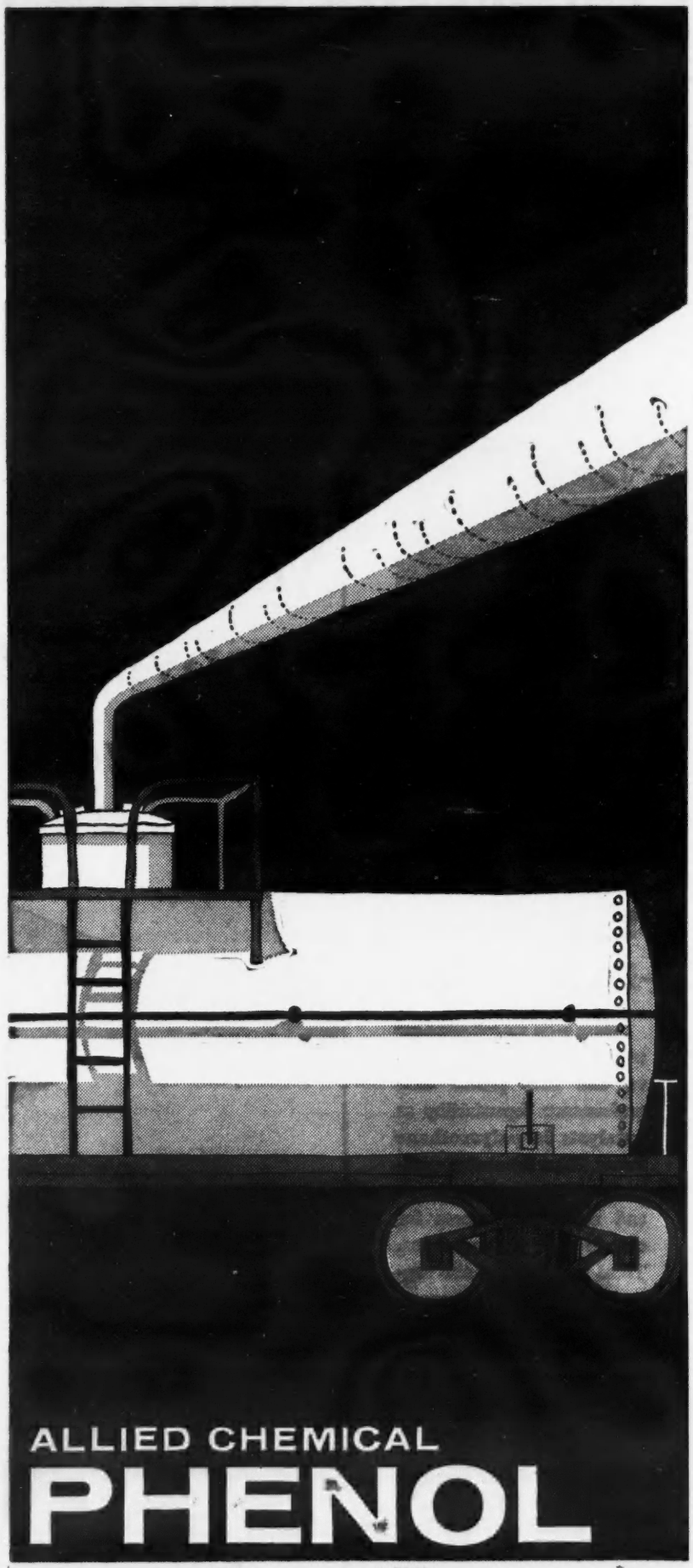
- NEW PREMIUM GRADE
- Food Processing Grade
- Technical Grade

Prices, analysis and details for your specific use are available upon request.

Technical Service Department

AMERICAN MAIZE-PRODUCTS COMPANY
250 PARK AVENUE • NEW YORK 17, N. Y.

ATLANTA • BOSTON • BUFFALO • CHICAGO • DENVER • GRAND RAPIDS • HOUSTON
LOS ANGELES • PHILADELPHIA • PITTSBURGH • ST. LOUIS • ST. PAUL • SAN FRANCISCO • SEATTLE



...Only Allied Chemical has every grade—both synthetic and natural! Allied's *basic* position assures customers a stable supply of phenol, natural or synthetic. Time-tested standardization procedures assure excellent uniformity. Order express shipments by tank car or tank truck.

Phenol, USP (Synthetic)
Technical Phenol (82%, 90%, 95%)
Phenol-Cresol Mix—Composition according to your specifications.

PLASTICS DIVISION
40 RECTOR STREET, NEW YORK 6, N. Y.

Allied Chemical

Coal Chemicals

As the end of the year approaches, comments on the state of business range the spectrum of adjectives. Two factors, however, appear to intrude themselves insistently into the conversations of executives discussing the coal chemicals industry. One is the burgeoning cost factor and the second—relatedly—the lack of suitable crudes. Production of most coal chemicals is well ahead of last year's output and sales have apparently shared in the advance. Profits on the other hand have not kept pace. It may be expected then that more and more emphasis will be placed on shaving costs wherever possible.

The problem of good crude material is one that has all indications of growing more critical as steel rate continues to hover around fifty percent of capacity. Result of the prolonged low rate and vast increase in demand for chemicals has created short supply positions for benzene, naphthalene, pyridine etc., and caused some producers to search for efficacious substitutes. Naphthalene, for example, is being run with a mixed stream containing monoethylnapnthalenes and o-xylene is being used by some to make phthalic anhydride. Only a sustained upturn in steel can return coke-oven supply of these vital materials to full supply and the prospect of any such increase appears to be anywhere from three to six months away.

Latest Tariff Commission report on production of coaltar crudes and intermediates compiled for September revealed most materials decreased or held even with the previous month's output.

Decreases in production as compared with August occurred in:
Monochlorobenzene—down 4.8 million pounds. Phthalic Anhydride—down 4 million pounds. Styrene Monomer—down 2.6 million pounds. Toluene—down 1.8 million gallons. Cresols—down 1.1 million pounds. Pyridine—down 86,000 pounds.

Significant increases were noted in: Dodecylbenzene—up 8.4 million pounds. Aniline—up 2.3 million pounds. Naphthalene—up 1.8 million pounds.

The American Iron and Steel Institute estimated steel production for the week ended December 4 would amount to 49.3 percent of theoretical capacity equivalent to 1,404,000 net tons of steel. Output in the previous week was 1,367,000 tons, 1,478,000 in the comparable week one month ago, and 2,650,000 tons during the corresponding week one year ago.

Price Trends

Advanced
None
Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 4, 1959
117.56*	117.64	117.64	118.45

* Revised.

For Current Prices see page 10

Basic Products

Benzene—Tight supply remains the prevailing feature of this basic material. Despite output that ranges 100 million gallons ahead of last year, supply is nowhere near demand levels.

Dec. 1 petroleum price change date passed quietly with no move by the industry to increase the 34c. a gallon posting. Cokeovern sources are expected to follow suit in maintaining the status quo.

Benzene production in September from all sources totaled 35,393,386 gallons, an increase of 209,254 gallons from the previous month's output.

Broken down by source material was supplied as follows:

Petroleum processors — 26,539,720 gallons, or 75 percent of the month's volume, up 1,064,736 gallons from August.

Cokeoven operators—8,106,724 gallons, or 23 percent of the month's volume, down 960,267 gallons from August.

Tar distillers—746,942 gallons, or 2 percent of the month's volume, up 4,785 gallons from August.

Total production in the first nine months of 1960 was 342 million gallons or benzene. In the same period last year output was 242 million gallons.

Broken down by source, production in the period January-September was:

Petroleum processors—221.5 million gallons.

Cokeoven operators—110.6 million gallons.

Tar distillers—10.2 million gallons.

Naphthalene — The tight supply of naphthalene continues unabated here and abroad.

Sources contacted last week reflected growing pessimism about the current situation. Only a few months ago many people felt that supply had nowhere to go but up and they now admit they were wrong for new lows were discovered.

Reports in the trade press last week revealed that some suppliers were employing mixed streams of naphthalene containing monomethylnaphthalene in an effort to bolster sagging naphthalene supplies. While the practice is not universal with producers it is evidence of the critical supply situation.

Phenol—The 1c. disparity in price of material offered to resin makers and non-resin makers is not likely to survive the end of the year. That's the opinion of several sources who feel the difference in price will be resolved at the higher level.

One trade source revealed last week that inquiries were more active recently, apparently based on the belief that the higher price will prevail for all consumers come next January.

Tariff Commission production figures for September were released last week and phenol, tech. and USP, showed an increase over August's output.

September's totals, partly estimated, were 59.3 million pounds, as compared with August's 57.5 million pounds.

Production this year through the first nine months is far ahead of the same period last year. During January-September this year volume was 577 million pounds as compared with 493 million pounds last year in the same period.

Pyridine—The 6c. price increase for 2° material is being adopted by the industry. That's the report of sources who last week stated that they have either already noti-

Aromatic Chemicals Output: September

Figures for benzene, xylene and toluene include cokeoven operators, tar distillers and petroleum operators. Creosote oil statistics include distillate as such, and creosote content of solution, on 100%-creosote basis.

		September 1960	*September* 1959	*First Nine Months* 1960	*First Nine Months* 1959
Aniline	lbs.	10,091,870	9,429,159	91,544,871	98,848,598
Benzene	gals.	35,493,386	19,409,051	342,452,191	141,843,164
Creosote, oil	gals.	6,091,377	6,236,318	68,816,938	68,838,289
Cresols, m-p and o-m-p fractions	lbs.	4,055,696	2,730,163	36,871,081	25,392,240
Cresylic acid, refined all sources	lbs.	4,766,539	5,774,994	42,819,185	43,119,042
Dodecylbenzene	lbs.	43,251,829	18,647,296	365,536,920	346,407,962
Monochlorobenzene	lbs.	43,630,975	50,801,464	449,852,406	403,561,005
Naphthalene, crude	lbs.	38,392,767	21,463,120	397,837,982	320,004,993
Phenol, tech. and USP	lbs.	59,309,101*	57,922,035	577,739,866	492,927,537
Phthalic anhydride	lbs.	29,168,883	27,091,096	289,523,691	278,102,988
Styrene monomer	lbs.	147,747,792	130,267,947	1,331,275,644	1,030,281,287
Toluene	gals.	23,636,364	20,841,746	200,405,724	182,610,436
Xylene	gals.	27,762,899	19,564,879	238,318,925	164,140,714

Source: Tariff Commission.
* Partly estimated.

Coal Chemicals

fied their customers of the change or will soon do so.

One supplier, however, is maintaining a 1c. spread between the carlot and less carlot listing so that his schedule reads, 75½c. a pound for carlot quantities and 76½c. a pound for less carlot amounts. Other producers are listing at 75½c. and 76c.

Supply of material continues restricted on the basis of diminished crudes from the cokeovens. The extremely tight situation has forced one supplier at least to allocate drum quantities of material.

Toluene—Petroleum producers by and large appear to have changed their schedules to an f.o.b., freight equalized basis. Cokeoven suppliers on the other hand are still delaying the decision to follow suit. As one source contacted last week declared, "We're marking time until the picture becomes clearer." One factor apparently influential in the eventual decision of coaltar producers is the price of barge material in the Gulf.

Toluene production in September totaled 23,636,364 gallons as compared with 25,464,855 gallons in August.

Petroleum processors reported output at 21,374,802 gallons, a decrease of 1,499,744 gallons from August.

Cokeoven operators turned out 2,003,775 gallons as compared with 2,364,215 gallons in the previous month.

Tar distillers recorded 257,787 gallons in September, an increase of 30,893 gallons from August.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended November 20, were as follows:

Ammonia liquor	lbs.	446,480
Ammonium sulfate	lbs.	18,692,874
Benzene	gals.	1,802,615
Coaltar	gals.	9,852,650
Crude chemical oil	gals.	288,089
Solvent naphtha	gals.	57,618
Toluene	gals.	403,325
Xylene	gals.	116,236

Intermediates

Phthalic Anhydride—The recent increase in price for PA which narrowed the industry price spread from 4c. to 3c., 19½ a pound in tankcas to 22½c. a pound in tankcars, was based on rising costs, say trade sources. In that reason one may read the tight supply of naphthalene which has plagued producer and consumer alike. The 1c. hike will in all probability be reflected in a ½c. price for plasticizers if the ratio between PA and plasticizers holds true.

Rubber Chemicals—Spotlighting buying trends last week a trade spokesman cited significant aspects of consumer behavior as observed in the marketplace this year. First, inventories have been kept at a minimum by consumers, far below levels maintained in previous years. Hand-to-mouth buying is the style accented by occasional rush orders when consumers underestimate stocks. Now at the end of the year, the source continued, traditional inventory slicing is taking place but like Sunday's roast on Tuesday there isn't much to carve from. Buying orders are therefore not being cut as deeply as in previous years when higher inventories were maintained.

Mercaptobenztohiazyl disulfide continues unchanged in price at 54c. a pound in ton lots, works, freight allowed. Diphenylguanidine is quoted at 51c. a pound, same basis. Di-otolylguanidine is posted at 71c. a pound, same basis. 2-Mercaptobenzothiazle is listed at 44c. a pound, same basis.

Plastic Horizons Officials Resign, Form New Company

W. C. Leipold and Maurice Brown have severed their connections with Plastic Horizons, Inc., in accordance with an agreement made with Celanese Corporation of America when the former was acquired by Celanese.

The two men, who were president and secretary-treasurer, respectively, of Plastic Horizons, have announced formation of a new company—Airpak, Inc.,—at Paterson, N.J., which will soon introduce what is reportedly a radically new plastic packaging product. They will be assisted in the enterprise by M. Chavannes, inventor of the product.

TRY JEFFERSON

AMINOETHYL-
PIPERAZINE
and
AMINE AL-2

AMINOETHYLPIPERAZINE is a high-boiling triamine combining a primary, a secondary, and a tertiary amine group in a single molecule. AMINE AL-2 is a light-colored, distilled mixture of primarily heterocyclic polyamines containing about 60-65 per cent aminoethylpiperazine.

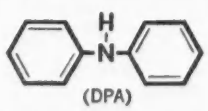
These polyamines, containing the piperazine nucleus, make excellent epoxy curing agents—impart good flexibility and high impact strength to the resin; excellent castings, laminates, and surface coatings are obtained. Suggested uses for their derivatives include corrosion inhibitors, asphalt anti-stripping agents, surfactants, and emulsion breakers.

Available in 55-gallon drums or tank cars. For technical information or samples, write Jefferson Chemical Company, Inc., 1121 Walker Avenue, P. O. Box 303, Houston 1, Texas.

JEFFERSON CHEMICALS

HOUSTON • NEW YORK • CHICAGO
CLEVELAND • CHARLOTTE • LOS ANGELES

DU PONT DIPHENYLAMINE



(DPA)

DPA and its derivatives can work for you as:
• antioxidants • anthelmintics • stabilizers
• additives • intermediates

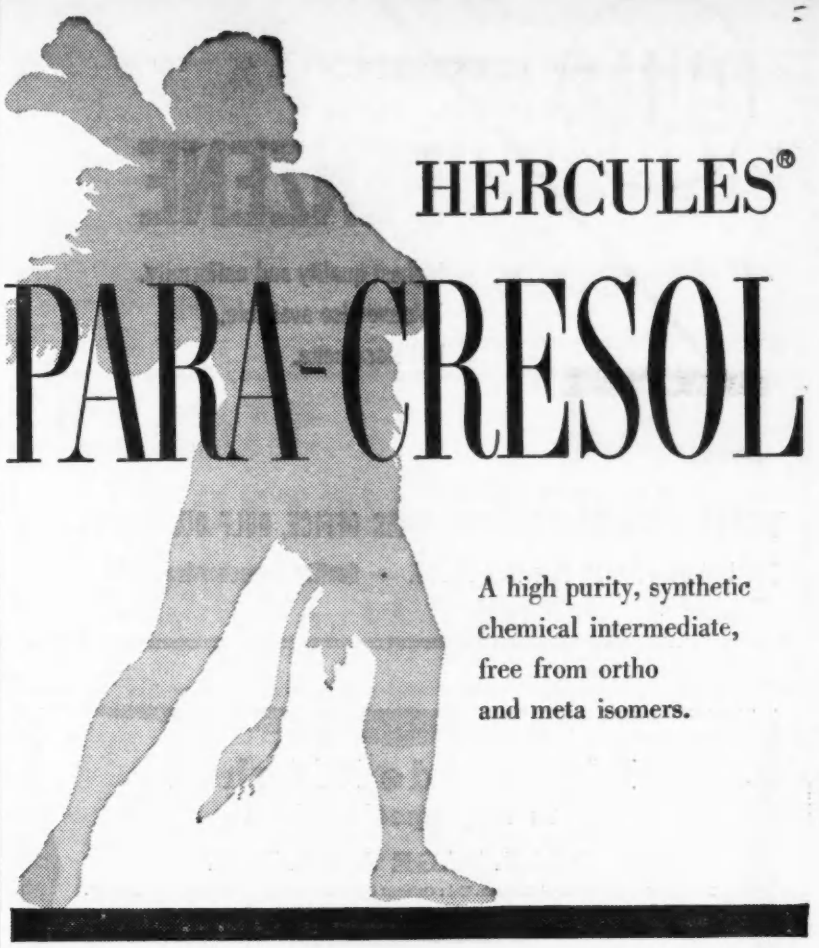
HERE'S WHERE:
• parasite control • lubricating oils • dyes
• plastics • explosives • antiknock compounds
• natural rubbers • synthetic rubbers

Available in carload quantities, high-quality Du Pont DPA, the lowest-cost aromatic secondary amine, has a minimum freezing point of 52.5° C., boiling point of 302° C.

For a fact-filled booklet, contact our branch office nearest you (Boston, Chicago, Cleveland, Houston, Los Angeles, New York, and Charlotte, N.C.) or write: E. I. du Pont de Nemours & Co. (Inc.), Explosives Dept., Wilmington 98, Del.

DU PONT

Better Things for Better Living...through Chemistry



HERCULES®
PARA-CRESOL

A high purity, synthetic chemical intermediate, free from ortho and meta isomers.

Naval Stores Department
HERCULES POWDER COMPANY
INCORPORATED
Hercules Tower, 910 Market Street, Wilmington 99, Delaware

NO 60-9

Want assured distillation range?

Benzene • Toluene • Xylene • Phenol • Cresol • Cresylic Acid • Naphthalene • Creosote • Picoline
Pyridine • Ammonium Sulfate • Ammonium Nitrate • Anhydrous Ammonia • Nitric Acid • Pitch

United States Steel Chemical sales offices in Pittsburgh, New York, Chicago, Salt Lake City and Fairfield, Alabama

USS Chemicals
TRADEMARK

GULF

BENZENE

Highest quality and uniformity.
Toluene also available.
Write or phone.

PETROCHEMICALS DEPARTMENT SALES OFFICE, GULF OIL CORPORATION
360 Lexington Avenue, New York 17, N. Y. • Quality Petrochemicals to Begin With

Electrode Pitches
to any specification
CHAS. PAGE & CO. INC.
P.O. Box 115, Grosse Ile, Michigan. Tel: Orleans 6-7522 and at 170 Broadway, New York 38.
a subsidiary company of CHAS PAGE & Co. Ltd., London, England.

WRITE FOR TECHNICAL DATA SHEETS

E. I. DU PONT DE NEMOURS & CO. (INC.) Wilmington 98, Del.
ATLANTA 3, GA. 1261 Spring St. N.W.
CHARLOTTE 2, N. C. 427 West Fourth St.
CHICAGO 3, ILL. 7 South Dearborn St.
PALO ALTO, CAL. 701 Welch Road
NEW YORK 13, N. Y. 40 Worth St.
PHILADELPHIA 3, PA. 1616 Walnut St.
PORTLAND, ORE. 1238 N.W. Glisan St.
RUMFORD 16, R. I. 50 North Broadway
DU PONT OF CANADA, LIMITED Montreal, Canada

NOW
OVER 350
INTERMEDIATES
MANY IMMEDIATELY AVAILABLE
Including:
p-Nitrotoluene Tech. p-Nitrobenzoic acid Tech.
2,4-Dinitrotoluene Tech. p-Aminobenzoic acid Tech.
o-Toluidine Tech. p-Toluidine Tech.

DU PONT DYES AND CHEMICALS
Better Things for Better Living . . . through Chemistry

Drug Research in Jersey Is 'Awesome' to Governor

The dimension of drug research in New Jersey has just been described as "awesome." Gov. Robert B. Meyner cited the spectacular research achievements of the state's pharmaceutical firms in a speech dedicating a $2 million New Brunswick plant facility at E. R. Squibb & Sons, a division of Olin Mathieson Chemical Corporation.

Dedication of Squibb's packaging and formulation building was part of a day-long program for Gov. Meyner and representatives of the state government sponsored by a major segment of the pharmaceutical industry in New Jersey. Executives of CIBA Pharmaceutical Products, Inc., Hoffmann-LaRoche, Inc., Johnson & Johnson, Merck & Co., Schering Corporation and Squibb participated in briefing the legislators on their industry's activities.

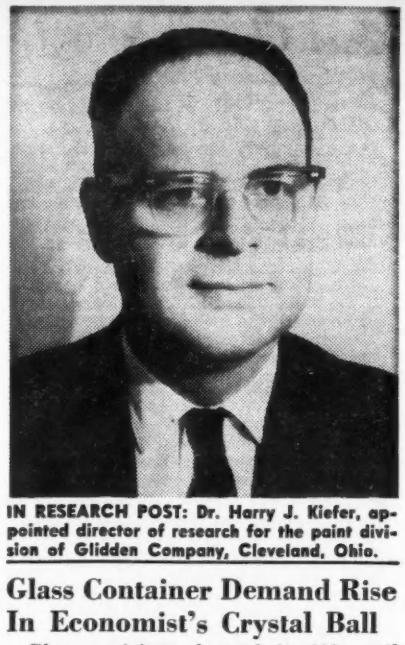
Graphite Sale Called Off; Offerings Were Too Low

General Services Administration has called off its efforts to sell about 740 short short tons of surplus graphite from the national stockpile because of the low prices offered by prospective buyers.

It is expected that the material will be offered again at a later date, however.

Four offers had been received for the material, under bids opened November 14. The material consisted of crystalline flake graphite, which is suitable for use in lubricants and packing.

When the material is reoffered in about a month, GSA also plans to put up about twenty-eight short tons of Ceylon amorphous lump graphite at the same time. This is used in carbon brushes, brake linings, paint and other commercial products.



IN RESEARCH POST: Dr. Harry J. Kiefer, appointed director of research for the paint division of Glidden Company, Cleveland, Ohio.

Glass Container Demand Rise In Economist's Crystal Ball

Glass container demand in 1961 will rise 7 percent over current levels, according to a forecast by Peter W. Hoguet, president of the Econometric Institute. Mr. Huguet tabs the 1961 total at 170.1 million gross.

In an address before the Glass Container Manufacturers Institute in Boca Raton, Fla., last week, Mr. Huguet said that demand for glass containers for food should hit 69 million gross, up 6 percent over 1960 levels. Medicinal and health glass containers, he added, would score a 12 percent gain to total some 24.3 million gross.

P. A.'s Are Echoing a Recessionary Note

—*Continued from page 4*

booming Christmas sales will be the spark to start us on a new upswing.

Commodity Prices

Again this month, more committee members say prices are down than those reporting prices up. The spread is not as great as last month, however, as 7 percent tell of higher prices, while 12 percent indicate lower prices. While some price firming was reported two months ago, the downward trend evident most of the year appears to have been resumed again. Actually, the opportunities for good buys have caused the downward curve more than any real reductions in list or book prices.

Most buyers do not see any strengthening in the price structure in the immediate future. The enigma of this is that, while buyers do not want to pay any more for the things they buy, most companies (including their own) are complaining about the pinch on profits at present prices.

Purchased Materials Inventories

The pressure to reduce purchased materials inventories continues. This month, 38 percent of our members report reductions and only 16 percent tell of increases. However, once again there is some indication that we are nearing the bottom, since last month only 11 percent reported increases.

Much of the current pressure for reductions results from the fact that slower-than-anticipated demand for finished goods has backed up materials along production lines to the point where purchased materials are not being consumed at expected rates. In any case, it appears that the demand for finished goods will have to pick up substantially before there is any desire to add to purchased material stocks.

Employment

Employment is off a little again in November. While the decline is not great, it is the fourth consecutive month the curve has trended downward. Also, the employment situation is substantially worse than it was at the beginning of the year. A slight pickup last June-July has been more than offset. This month, 10 percent tell of an improved employment situation, while 29 percent say their employment is down; 61 percent report no change since October.

The usual hiring to take care of Christmas retail business is not expected to reach the levels of the past two years, which further clouds the employment picture for the holiday season.

Buying Policy

The fact that 84 percent of the members of the business survey committee say they are committing for their production materials requirements on a sixty-day-or-less basis is evidence enough of the short-term buying policy that has been adopted by most purchasing executives. In the case of MRO items, 77 percent are buying on a thirty-day-or-less basis. If upped to a sixty-day basis, it becomes 96 percent of those reporting on MRO. Only in capital items does forward buying extend beyond sixty days; and, even there, only 38 percent go beyond six months. Few seem willing to change this pattern in the near months ahead.

	Per Cent Reporting				
	Hand to Mouth	30 Days	60 Days	90 Days	6 Mos. to 1 Yr.
November					
Production Materials	12	38	34	12	4
MRO Supplies	32	45	19	3	1
Capital Expenditures	17	8	15	22	38
October					
Production Materials	10	40	33	13	4
MRO Supplies	26	46	23	4	1
Capital Expenditures	19	4	12	26	39

Specific Commodity Changes

Specific changes are spotty this month. The list of ups and downs changes from month to month, as good buys result in lower prices being paid by some. On the other hand, local or regional conditions cause prices to increase on other items. Generally, the "ups" balance the "downs" and the net result is only slightly downward.

On the up side are raw sugar, jute, burlap, railroad freight rates, magnet wire, carbon brushes, and some vegetable oils.

On the down side are scrap steel, corrugated boxes and cartons, corn starch, wood pulp, rubber and cotton.

In short supply: phthalic anhydride.

SULPHATE OF AMMONIA
★ Top Quality
★ Bulk or Bagged
★ Prompt Delivery
REPUBLIC STEEL
GENERAL OFFICES • CLEVELAND 1, OHIO
Export Department: Chrysler Building, New York 17, N.Y.

Agricultural Chemicals

With the off-season predominating in both fertilizer and pesticide markets, marketing men and USDA are looking over the ledger to determine what sort of a year 1960 was for agriculture chemicals. Most sources report sales during the crop year 1959-60 above those in the previous year. But final reports will be made in the near future. The routine nature of the market extends into formula feed business. Such normally active items as fishmeal and scrap have been becalmed in an unusually quiet market over the past few months. Some improvement in the feed stuffs market is anticipated with the colder weather.

A leading chemical producer announced last week that construction of a new unit is underway for the production of 2,4-D and 2,4,5-T esters for broadleaf weed and brush control. Scheduled to come on stream in January, the facility is reported to have design features that will provide improved quality in the production of the esters while assuring a reserve capacity to meet peak season customer demands.

The company estimates the current domestic market for the esters at 29.1 million pounds annually or an increase of approximately 25 percent in the past five years.

According to the company, use of 2,4,5-T now extends to brush control treatment of roadsides, railroads and utility company rights-of-way, pasture and timber lots. Both compounds rank as the most widely useful of the weed killing chemicals, reportedly offering low cost control of almost 500 different types of weeds and brush.

The major quantity of 2,4-D produced is used in corn, wheat sugar cane and rice. But other uses are reportedly being rapidly developed. Acceptance is said to be gaining for the herbicides as an aquatic control of weeds that clog drainage ditches and ponds.

Pesticide men are being held responsible for a type of technological unemployment because of the diligent practice of their trade. Mr. Alfred Testo, flea circus owner, is reported to be hard-pressed finding enough replacements for this vanishing art form. Performing fleas have a life-span of only ninety days under the rigors of circus life. The high turn-over has presented supply problems over the past few years. DDT, it seems, is ruining him.

P.irritants were once plentiful in England, according to Mr. Testo, before the days of DDT. Now the creatures have to be imported from such places as Ireland and Portugal. The Irish species are cheaper, going for the equivalent of 7 cents per flea, while the Portuguese variety commands a 35 cent premium. The higher costs might price him out of business, Mr. Testo feels.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 4, 1959
111.26	111.26	111.26	110.31

For Current Prices see Page 10

Animal and Plant Foods

Shipments of bulk fertilizer more than doubled during the period 1954-59, according to reports compiled by the Research Service of the US Department of Agriculture. The report states that liquid fertilizer increased nearly four times, and solids increased by about 50 percent over the 1954 figure. The larger increase for liquid fertilizers was explained as the result of liquid fertilizer's smaller base period, being relatively new, so that the growth pattern was accordingly more rapid.

Of all bulk fertilizers retailed in 1954, liquids represented but 2.58 percent while solids constituted 8.03 percent. Bulk shipments of both liquid and solids were substantially highest in California, Illinois, Iowa and Missouri. Their combined tonnages represented 48 percent of the national total of bulk shipments in 1959.

Mixtures shipped in bulk in 1959 accounted for 46 percent of the national total of solid bulk shipments and 21 percent of liquid shipments. In 1954, these proportions were 26 percent and 5 percent respectively. New England was the only area where bulk shipments failed to rise during the reported period.

Last year, solid chemical nitrogen materials shipped in bulk went in large measure to the Middle Atlantic states, while none were reported shipped to Hawaii or Puerto Rico.

Solid nitrogen materials shipped in bulk in 1959 amounted to 4.71 percent, compared to 1.09 percent in 1954.

National use of ammonia, anhydrous, aqua and nitrogen solutions, increased from 16.62 percent in 1954 to 37.12 percent in 1959, when compared to the total tonnage of chemical nitrogen materials consumed. Bulk shipments of these liquid products were significantly higher in all regions.

Phosphate materials shipped in bulk in 1959 accounted for about 31 percent of the total solid bulk national shipments and one percent of liquid shipments. In 1954, these shipments were proportionately 50 percent and 3 percent, respectively.

Potash shipments shipped in bulk accounted for 5 percent in 1959, as against 1.5 percent in 1954 of the national total. Potash liquid shipments were reported as insignificant. Solid potash shipments last year, ranged from 1.89 percent in the South Atlantic states to 47.05 percent in the East North Central states.

Other classes of materials shipped in bulk were the natural organics and the secondary trace nutrients materials. In 1954 and 1959, the national consumption of the natural organics amounted to 420,068 tons and 517,948 tons, respectively.

Animal Proteins—Market for fishmeal and scrap continue to be described as quiet and unchanged. Listings failed to move from their long-standing position of $90-$92 per ton for meal, bagged, on both Atlantic and Gulf coasts. Scrap holds at its usual $4 per ton lower listing, also unchanged. Demand is reported as about routine in most market areas.

Formula feed sales, held back somewhat by warmer weather over much of the country, are expected to rise to their seasonally high levels as colder temperatures become more prevalent.

Urea—Total primary production (100 percent urea basis) during September, as reported by the Tariff Commission, was 99,515,040 pounds. This was over 85 million pounds greater than the output during the previous month. August's production was reported at 91,007,905 pounds.

Pesticides Output

Following are production statistics reported by the Tariff Commission representing the number of pounds of certain pesticides produced during September, 1960, with August's production figures supplied for comparison:

	August 1960	September 1960
	Pounds	
DDT	14,523,372	13,749,893
2,4-D*	*2,223,944	*2,155,744
Ester & Salts	1,999,472	*1,614,662
Acid equivalent	*1,451,775	*1,183,719
BHC	1,725,104	1,607,994
Gamma isomer	524,384	534,719
2,4,5-T	—	—

* Partly estimated.

Pesticides

A strong quarantine program to prevent entry of new citrus and subtropical fruit pests into the United States has been urged by the USDA's citrus and subtropical fruit research and marketing advisory committee.

The committee also called for expanded research to speed development of more effective harvesting methods and equipment for citrus and subtropical fruits to reduce costs and aid in maintaining quality.

In the field of entomology research, the committee recommended the initation of Mediterranean fruit fly research in Central America, where the area infested by the fly is enlarging, and expanded research on the biological control of citrus fruit insects and mites by parasites, predators and diseases.

CALL FOR DUVAL

For the finest service and quality!

• MURIATE OF POTASH
• SULPHUR

Produced by

DUVAL SULPHUR & POTASH CO.

EXCLUSIVE SALES AGENT

ASHCRAFT-WILKINSON COMPANY

ATLANTA, GEORGIA

DDT

CUSTOM GRINDING

LEBANON CHEMICAL CO.

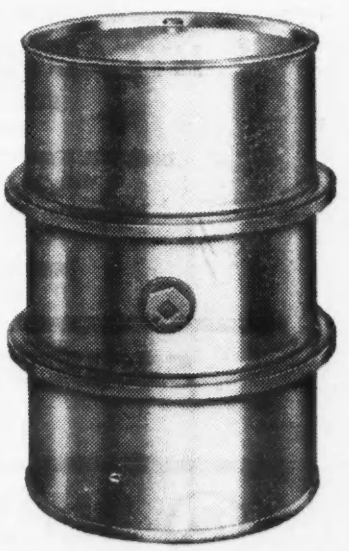
P. O. 532, LEBANON, PENNA.

Get it First . . . . . .
Get it All . . . . . .
Get it Straight . . . . . .
. . . . . in OPD

whether you need 1 or a carload

CALL ON INLAND FOR HIGH QUALITY STAINLESS STEEL DRUMS

If you ship chemicals, acids, pharmaceuticals, foods or other products that require the extra protection of stainless steel, it will pay you to check the many advantages of Inland Stainless Steel Shipping Drums. Manufactured in a range of sizes from 15 to 60 gallons, from many types of stainless steel, with double-seamed or all welded construction, with all modifications necessary to meet ICC specifications 5 and 5C. Inland can supply the right drum for your requirements . . . whether you need 1 or a carload!



One of Inland's Stainless Steel Shipping Drums. An ICC 5C drum, 55 gallon, 16 gage, all welded construction (flanges, heads, bottoms and side seams) I-bar rolling hoops. Many other sizes and types are available. Call on Inland for your process drums and stainless steel shipping pails too!

Also available with rubber rolling hoops if desired.

free

"The Use and Care of Stainless Steel Drums"

Here is a useful, new booklet. It gives valuable information on how to use and get maximum life from stainless drums and fully describes the Inland line. Send in this coupon for your free copy.

☐ *Please send free copy of "The Use and Care of Stainless Steel Drums".*
☐ *Please have your representative contact me.*

Name _____ Title _____
Company _____
Address _____
City _____ Zone _____ State _____

Full line of steel and stainless steel shipping and processing containers, including galvanized and heavy duty ICC drums.

member of the INLAND *steel family*

INLAND STEEL CONTAINER COMPANY

Division of Inland Steel Company · 6532 South Menard Ave., Chicago 38, Illinois · Plants: Chicago, Jersey City, New Orleans, Cleveland and Greenville, Ohio.

METOL

Monomethylparaminophenol Sulfate
Registered Trade Mark

TANNIC ACID GALLIC ACID
(U.S.P. and Technical Grades)

PYROGALLIC ACID
(U.S.P. and Technical Grades)

THE HARSHAW CHEMICAL CO.
CLEVELAND 6, OHIO

Cleveland • Chicago • Cincinnati • Detroit • Hastings-on-Hudson, N. Y.
Houston • Los Angeles • Philadelphia • Pittsburgh

GLYCO CHEMICALS

EMULSIFYING AGENTS

ETHYLENE OXIDE ADDUCTS

GLYCOMUL®
Sorbitan Fatty Acid Esters

GLYCOSPERSE®
Polyoxyethylene Sorbitan Esters

GLYCOL AND POLYGLYCOL ESTERS

ALDO®
Glyceryl and Propylene Glycol Esters

ACRAWAX® C
Synthetic Wax with Melting Point of 140°-143°C. (284°-290°F.)

HYDANTOIN DERIVATIVES

DIMETHYL HYDANTOIN (DMH)
Chemical Intermediate

DIMETHYL HYDANTOIN FORMALDEHYDE RESIN (DMHF)
Water and Alcohol-Soluble Film Former

MONOMETHYLOL DIMETHYL HYDANTOIN (MDMH)
Odorless Formaldehyde Donor

DIBROMO DIMETHYL HYDANTOIN
Mild Brominating Agent

SEQUESTERING AGENTS

THE TETRINES®
(EDTA and its Salts)

GLYCO CHEMICALS
DIVISION OF CHAS. L. HUISKING & CO., INC.
417 Fifth Ave., New York 16, N. Y. • Telephone: ORegon 9-8400

Glyco Chemicals Announces the appointment of its NEW

WEST COAST DISTRIBUTOR
serving Arizona, California, Oregon and Washington:

QUAD CHEMICAL CORPORATION
2472 Hunter Street, Los Angeles 21, Cal. • Telephone: MAdison 7-0555

Drugs, Fine Chemicals

Higher replacement costs have forced dealers here to boost quinine prices. Under new schedules, the alkaloid is quoted at 37½ cents per ounce for 1,000-ounce lots in drums, up from 31.05 cents, and for a similar quantity and packaging, quinine sulfate is priced at 31½ cents; the bisulfate at 28 cents; and the hydrochloride at 36½ cents. In cases of cans, prices are uniformly ½ cent per ounce higher to compensate for the additional labor, freight and packaging costs involved.

Quinine schedules were last advanced in March of this year, when Dutch, British and German suppliers upped prices and shortly after General Services Administration turned down all bids on the 13.8 million ounces of stockpiled quinine it has been trying to unload—without repercussions—for years. Presumably, this material, mostly sulfate powder, will be put on the block within a few weeks.

GSA is also getting ready to dispose of 453,000 ounces of quinidine, also found excess to national stockpile requirements. The fiasco-fearing agency plans to offer no more than 100,000 ounces at any one time and to space its offerings at six month intervals. Furthermore, to encourage small businesses to participate in the sale, it will allow bids on as little as 1,000 ounces.

Drug firms apparently have put one point across to an influential segment of the public. Surveyed by Kenyon & Eckhardt advertising agency, some 1,091 housewives gave the industry a near-top score (9.1 out of a possible 10) in this category: Spends a great deal of money on research, trying to improve the quality of its product.

In two other categories, however, the industry didn't come off as well. Makes better products than 10 years ago; score—8.6. Gives good value for the money; score—6.7.

Aspirin—A major producer has completed a 25 percent expansion of its bulk aspirin facility. In announcing plans for the traditional capacity last April, the firm noted that its plant was already the world's largest.

Undoubtedly, the additional production now coming from the facility will be readily absorbed in domestic as well as world markets. January-June output, at 12 million pounds, represented a 26 percent increase over 1959 and an all-time high for the period. In the same six-month period, exports rose 9 percent, from 469,592 to 513,832 pounds, with major shipments going to Canada (87,500 pounds); Columbia (84,932); Philippine Republic (77,198); and Chile (67,078).

Camphor—Taiwan, a major grower and refiner of camphor, set a production goal of 396 tons for 1960. Owing to limited cutting of trees by the Provincial Forestry Bureau and unfavorable marketing conditions, however, this goal may not be reached.

This report, from Business and Defense Services Administration of the Department of Commerce, may interest US manufacturers of synthetic camphor who have felt the sting of lower-priced imported goods this year, and, who, reportedly, have sufficient capacity to supply world requirements.

The Taiwan Camphor Refinery, under the management of the Taiwan Tobacco and Wine Monopoly Bureau, is the sole producer of natural camphor and its by-products on the island. Annual refining capacity is 1,200 metric tons of refined camphor and 880 metric tons of by-products.

The total vloume of camphor trees on the island is estimated at 3 million cubic meters. As a rule, the trees are not cut until they are 50 years old.

In 1959, Taiwan exported 96,596 pounds of camphor and 53,550 pounds of by-product oils.

Dihydrostreptomycin—The fat was in the fire, apparently, long before the Food & Drug Administration gave out the explosive news that it was proposing new labeling regulations for DHS which, in effect, would seriously limit human consumption of the antibiotic.

FDA's announcement to the press came in late September but producers of the drug evidently had gotten the word several weeks before. Or so one may conclude from the fact that DHS production fell from 15,687,086 in August to 5,061,653 grams in September, the lowest figure for any month this year. In September 1959, production was 21,568,989 grams, according to the Tariff Commission.

The thread of the story probably extends back to July when production dropped to 6.3 million grams from about 17 million the preceding month. This would indicate that FDA's announcement was anticipated and that production was built up in August so as to have sufficient inventories from which to supply veterinary users, the major market for the antibiotic, for some time now, while FDA deliberated its next move.

Menthol—Shipping prices for both Japanese and Formosan menthol are lower with some small lots of the former available on spot, reportedly, at $10.50 to $10.75 a pound.

Brazilian menthol prices here are also weaker due, it's said, to new crop influences and the lack of new demand. Quote is variously reported but the low is about $8.60 a pound.

Penicillin—Logically, one might expect antibiotics production to increase with fall. For penicillin, however, the reverse was true this year. At 51,502,929 million units in August, total output dropped appreciably in September to 38,637,214. In 1959, production was 42,309,824 million units in August, and 43,696,347 in September.

Weak prices may have been responsible for the cutback. Excess availability and attendant pressures to build sales volume have made this market extremely competitive, with prices falling as much as $2 a billion units in recent weeks, and manufacturers may be trying to create stability.

Penicillin sales may have been given a boost by the very strong egg market that has baffled, sometimes delighted commodities traders since mid-summer. This would follow from the fact that poultry feed supplements, to stimulate fast growth and increase egg production in chickens,

—Continued on page 54

Price Trends

Advanced
Quinine, NF, 6.45c. per oz.
Quinine bisulfate, 4.70c. per oz.
Quinine hydrochloride, 6.20c. per oz.
Quinine sulfate, 5.25c. per oz.

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 4, 1959
59.27	59.27	59.78	60.23

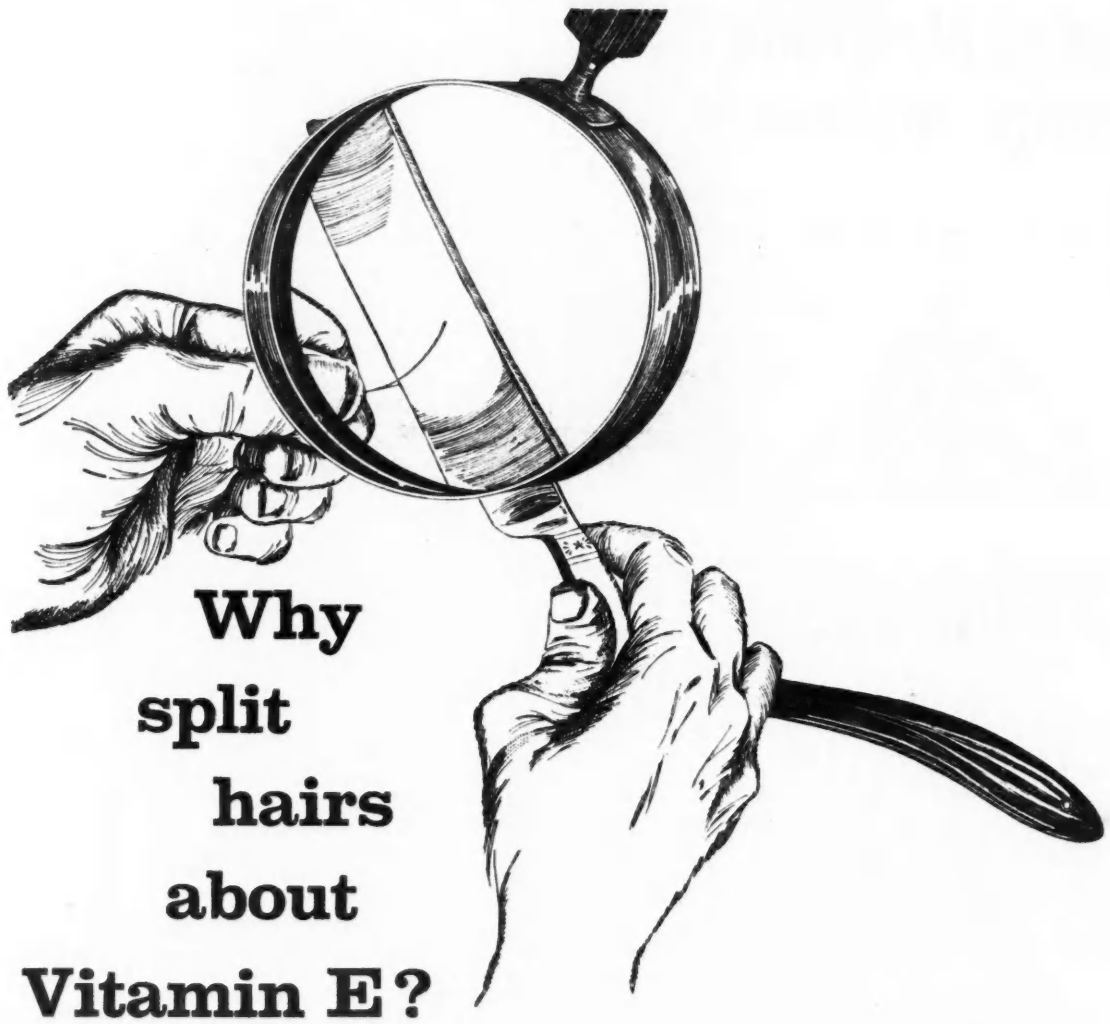
For Current Prices see Page 10

Drugs and Fine Chemicals Output: September

Following statistics for selected fine chemicals and drugs were compiled by the Tariff Commission. Figures relate to the production of bulk material only.

		September	August
Acetylsalicylic acid	lbs.	1,733,430	1,808,021
Ascorbic acid and salts	lbs.	450,843	440,420
Dihydrostreptomycin	gms.	5,061,653	15,687,086
Niacin and amide	lbs.	139,065	256,861
Penicillin salts	million-units	38,637,214	51,502,929
Phenobarbital	lbs.	—	—
Pyridoxine	lbs.	6,675	6,558
Streptomycin	gms.	25,115,872	25,909,991
Sulfa drugs	lbs.	413,654	396,609
Tetracycline	gms.	13,266,801	—
Thiamin derivatives	lbs.	31,871	31,321

A dash (—) indicates data not reported.



Why split hairs about Vitamin E?

Vitamin E is Vitamin E. It has to be.

- A unit is a unit.*
- You buy a unit.
- You pay for a unit.
- You label it a unit.

A unit of E is a unit of E
No matter what the kilo cost may be;
The unit cost is based on parity.
Type makes no difference, as you can see.

*THE RECOGNIZED INTERNATIONAL UNIT OF VITAMIN E IS 1 MILLIGRAM OF DL-ALPHA-TOCOPHERYL ACETATE. ADOPTED IN 1941 USING ROCHE VITAMIN E FOR THE STANDARD.

Get your Vitamin E *right* from Roche.

FINE CHEMICALS DIVISION **HOFFMANN-LA ROCHE INC.** Nutley 10, New Jersey

ROCHE® ©1960 HLR INC.

Diethyl Malonate
Dimethyl Malonate

KAY-FRIES CHEMICALS, INC.

180 MADISON AVE.,
NEW YORK 16, N. Y.
MU 6-0661

VITAMIN D-2 and D-3
Stable to Minerals and Oxidation
Calciferol
Crystalline D_3 Crystalline D_3 Compound
Oil & Water Miscible (Mineral) Stable Powders
Dihydrotachysterol

PURE VEGETABLE EXTRACT COLORS
YELLOW — RED — ORANGE

BOWMAN YEAST PRODUCTS
Hickory Smoked Yeast
Primary (Torulopsis utilis) Brewers' (Sacchromyces cerevisiae)
Powders — Flakes — Extracts — Concentrates — Hydrolysates
Vitab® B-Complex Extract

SPECIALITIES
CHLOROPHYLL CAROTENE
PHYTOL XANTHOPHYLL
ANTI-OXIDANT (BHT)
ENZYMATIC SYSTEMS
PROTEIN DERIVATIVES

CHARLES BOWMAN & COMPANY

220 East 42nd Street, New York 17, N. Y.
600 Southh Michigan Avenue, Chicago 5, Ill.
130 Central Avenue, Holland, Mich.
3030 Hines Avenue, Culver City, Calif.
Chorney Chemical Co., Montreal, Canada

Drugs, Fine Chemicals

—Continued from page 52

is today one of the antibiotic's largest non-medical markets.

Export demand for penicillin rose 28 percent, to 65,592 billion units, during the first six months of 1960 from the comparable period in 1959. Shipments in bulk totaled 40,430, and dosage forms, 25,161 billion units. Large quantities went to Mexico (10,602 billion units); Canada (8,070); and France (4,341).

Phenothiazine—Higher prices, resulting from increased material and manufacturing costs, have been effective since October 1. This is the up-to-date schedule for phenothiazine NF: truckloads, 45c. a pound; ton lots, 48c. a pound; 300 to 1,950 pounds, 52c. a pound; and 50 to 250 pounds, 52c. a pound.

Excepting the small quantity listing, quoted f.o.b. warehouse, all other prices are delivered.

For phenothiazine drench, prices are uniformly 1c. a pound higher and the same shipping terms apply.

Polio Vaccine—Manufacturers of Salk (killed virus) polio vaccine have been urged to "begin planning now for mid-winter campaigns" to prevent epidemic outbreaks of polio next summer.

The appeal comes from the Surgeon General of the US, Dr. Leroy E. Burney, who says that the much-heralded oral, live-virus vaccine will not be ready for use before next summer.

When approved last August by the government, the live-virus vaccine was expected to be in production and ready for use before the 1961 polio season got underway.

Speaking before a meeting of the American Medical Association last week, Dr. Burney denied reports that the pharmaceutical manufacturers were "dragging their feet" in getting into production. He noted also that two drug firms had already said they will produce the vaccine and that several others have evinced similar interest.

Botanicals

Although several of the big-use domestic items were in good demand and commanding relatively high prices — for example, witch hazel leaves activity generally, and especially among the imported botanicals, last week was no better than routine. Dealers noted a rise in the number of small lot orders, a developing trend throughout a large segment of the drug and fine chemicals market.

Agar—Spot prices continue at a range of from $2.75 to $3 a pound for USP Kobe No. 1 strip, but little material is available even at these prices. Some material is being offered us, importers here report, quickly adding that shipping prices are almost on a par with those on spot, a factor which has discouraged them from buying. Situation could change shortly, however. New crop will be available for shipment in January, to arrive here a month or two later.

Water-Soluble Gums—Arrivals of gum arabic were 20 percent lower in the first 6 months of 1960 than in the 1959 period, but inasmuch as annual consumption will probably at least equal that of 1959, imports in the second half of 1960 probably will increase sufficiently to reach the 1959 total, the Commerce department's Business & Defense Services Administration reports.

Tragacanth imports were 28 percent higher in the first half of the year than in the comparable period in '59, while karaya receipts were about 2 percent greater.

Locust bean gum, BDSA notes, has not regained the markets lost to guar gum several years ago, when poor harvests caused by severe cold and storms cut output in producing regions, leading, in turn, to higher prices.

Five countries accounted for locust bean gum imports in June (in thousand pounds): Italy 337; Portugal 167; Greece 66; Netherlands 64; and Spain 55.

NOW OVER **18,000** BIOS CHEMICALS

- TRICHLOROGERMANE
- TRICHLOROSILANE
- TRIETHANOLAMINE TRINITRATE
- TRIETHYL ANTIMONY
- TRIETHYL BORATE
- TRIETHYLCHOLINE
- TRIETHYLENEMELAMINE
- TRIMETHYLADIPIC ACID
- TRIMETHYL ANTIMONY
- TRIMETHYL BORATE
- TRIPHENYL BORATE
- TRIPHENYLBORON
- TRIPHENYLETHYLENE
- TRIPHENYLFORMAZAN
- TRIPHENYLFULGIDE
- TRISILANE
- TRITOLYLAMINE
- TROPINE
- TUMENOL
- TYROSYLGLYCYLGLYCINE
- UMBELLIFERONE

Ask for our new complete catalogue.

BIOS *Laboratories Inc*
17 West 60th St., New York 23, New York
Plaza 7-8171

NEPERA

PIONEERS IN PYRIDINE CHEMISTRY
are the original and leading producers of the urinary analgesic

PHENYLAZODIAMINOPYRIDINE HCl

This formulation has for years been a standby analgesic for reducing pain, burning and urgency in infections of the urinary tract. For information concerning it, and Nepera's other pyridine products, call New York City—WO 6-3273—or write to
NEPERA CHEMICAL CO., INC., HARRIMAN, N.Y.

DCI MAGNESITE
Caustic Calcined. Available in lump size or ground to your specifications.

DCI MAGNESIUM CARBONATE
Technical. Fine, uniform, white powder, passing 99.9% thru 325 mesh. Bulk density 9 lbs. per cu. ft. Very active.

See what **DCI MAGNESIAS** can do for **YOU**

DCI MAGNESIUM OXIDES
Technical. Extra light and medium light grades. Wide range of desirable physical and chemical characteristics for many applications.

For information and samples write: Darlington Chemicals, Inc., 2 Penn Center Plaza, Philadelphia 2, Pa. Phone: LOcust 3-9241.

DARLINGTON
MAGNESIUM CARBONATE
MAGNESIUM OXIDE
MAGNESITE

Safrol, Sassafras Exit; Substitutes Enter

—Continued from page 3

the spring of this year, most manufacturers had switched to other flavorings.

Last November 19, the American Bottlers of Carbonated Beverages, saw the handwriting on the wall and issued a final warning to all manufacturers and bottlers against any products containing the flavorings and to withdraw any such products from the retail markets. The National Confectionery Association also took similar action.

An extensive survey by FDA later in the month disclosed that the warning was being heeded. Use of the flavors by other than the beverage industry is so small as to be of little significance, FDA said.

FDA's order, published in the *Federal Register*, December 3, was based on conclusions reached by a special scientific committee appointed by Secretary of Health, Education & Welfare Arthur Flemmfng. It was made up of two scientists from FDA, one from the National Cancer Institute, one from the Department of Agriculture and three nominees of the National Academy of Sciences.

The committee reached the following conclusions:

- Safrol is a hepatotoxic agent in rats and dogs.
- In the single life-span experiment which has been completed, a statistically significant number of malignant liver tumors has been found in the group of rats (male and female) fed the highest dose level (5,000 ppm) of safrol. When the data for each sex was examined, only the female rats showed a statistically significant incidence. Groups of rats fed lower levels (1,000 ppm and below) did not contain an incidence of malignant tumors significantly different from that found in the control group.

At the 1,000 ppm level female rats contained a significantly higher incidence of benign hepatomas than did the female controls. Lower dose level female groups were not significantly different from controls and none of the male groups had a significantly elevated incidence of benign hepatomas.

Extensive Tests on Dogs

Chronic experiments on dogs are in progress in the FDA laboratories and also in the Food & Drug Research Laboratories. Both of these experiments have been in progress for between two and three years. The dose levels being studied are 20, 10 and 5 mg/kg/day. These animals are alive and in apparent good health at the present time.

- In the long-term rat-feeding experiment, the total tumor incidence of all types was not significantly different at any dose level of safrol from the incidence in the control group. The increased incidence of liver tumors in the 5,000 ppm group was balanced in numbers by a reduction in the mammary tumor incidence; this reduction may be due to the non-specific factors of inanition and increased mortality in this group.
- A decision at this time as to whether safrol should be classed as a substance which produces cancer thus rests on the one long-term production of malignant liver tumors in rats. This experiment was carefully and competently executed and the opinion of the panel is the safrol is a weak hepatic carcinogen; to confirm the scientific validity further experiments are suggested.

FDA said that the additional scientific work will be carried on and will consist of the completion of safrol feeding studies on dogs which are in progress at its own laboratories as well as in industry research laboratories.

Formica Appoints Smith

Walter A. Smith has been named executive vice-president of Formica Corporation, Cincinnati, Ohio, a subsidiary of American Cyanamid Company. Mr. Smith will have direct responsibility for general management of all Formica operations at Cincinnati and Evendale, Ohio, and Farmville, N.C.

Fine Organics

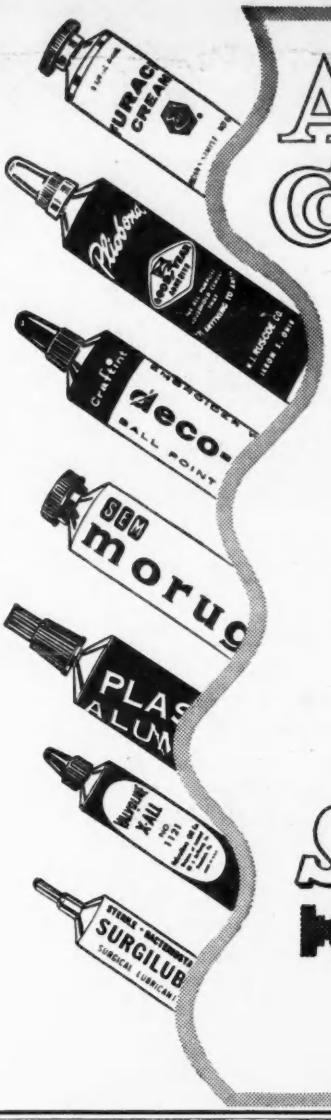
8—Hydroxyquinoline Base, Salts, and Derivatives

METASOL Q40
Copper 8—Quinolinolate (40% Dispersion) Miscible in water and oil systems

BENZOCAINE U.S.P.

Your No. 1 source for Bactericides, Fungicides, Quality Organics, Mercurials

METALSALTS CORPORATION
200 Wagaraw Road
Hawthorne, N. J.
Phone: (N.Y.) PE 6-2626
(N. J.) HA 7-6000



Accent on CONVENIENCE

When you package in metal tubes, you can take advantage of the functional design of the openings. These, in most cases, serve as applicators, providing extra convenience in using the product.

Any size, any style, any opening, but only ONE quality – Standard!

Look for "Standard" in your classified phone directory, under "Collapsible Tubes"

Standard COLLAPSIBLE TUBE CO.
Rochester, Pa.
Offices in Principal Cities
X6

B.L. LEMKE & CO. INC. MANUFACTURING CHEMISTS
If it's PABA ask LEMKE
PABA Acid – PABA Potassium – PABA Sodium
PLANT AND OFFICES: LODI, N. J.
TELEPHONE - NEW YORK: BRyant 9-0677
LODI: PRescott 3-3900

BROMINE POTASSIUM BROMIDE SODIUM BROMIDE
J. Q. DICKINSON & CO. :-: MALDEN, W. VA.
FOUNDED 1835

We constantly supply from our own production a hydraulically pressed
WHEAT GERM OIL
which retains its natural properties and with its high emulsion capacity, is suitable as a carrier of vitamins E and F for use in food fats, pharmaceutical and cosmetic preparations.
DR. RITTER & COMPANY
COLOGNE/RHINE, GERMANY • Siegburger Strasse 195

PHARMACAPS
Exclusively Devoted to Economical High Volume Production of Quality
ONE-PIECE OR TWO-PIECE
HARD OR SOFT SHELL
GELATIN CAPSULES

STOCK and PRIVATE FORMULAE

IMMEDIATE SERVICE ON ALL ORDERS FROM A SINGLE CASE TO 1,000 CASES
Now with our new inventory control system and modern facilities, all your orders . . . large or small . . . are efficiently and immediately processed. Depend on Pharmacaps to meet your delivery schedule!

LET US HELP YOU PYRAMID SALES
You are invited to use our skilled technical and formulation service for developing new products or improving your present items. If you are getting started or expanding your line, you will profit from our specialized experience in private formula and standard capsules. Discuss your plans with us in strictest confidence. Visit our plant or write.

Consult us on your Packaging Problems
•
Write for Quotations on your Private Formulae

Write for Current Price Bulletin on Stock Items
Pharmacaps, inc.
1111 Jefferson Avenue, Elizabeth, N. J.
In New York call WHitehall 3-0658 • In New Jersey call ELizabeth 4-6900

DAWE'S

a dependable source for

SODIUM GLUCONATE

and GLUCONIC ACID

Promptly available in any quantity.

Warehouse stocks across the country.

Dawe's high quality is assured.

Write for technical data and samples.

DAWE'S LABORATORIES, INC.
4800 South Richmond Street
Chicago 32, Illinois

Dawe's

A SPECIAL MESSAGE TO PHARMACEUTICAL MANUFACTURERS

Contract work, including individualized packaging and private formulation, has been a specialty of ours for many years. Fine quality, finished products are delivered . . . tested, approved, and guaranteed! Packed as you wish . . . ready for you to ship.

Not only quality, but economy is assured by our completely integrated facilities which cover every phase of manufacturing. **These include:**

ANALYTICAL LABORATORIES FOR ASSAYING RAW MATERIALS AND FINISHED PRODUCTS.

AUTOMATIC TABLETING, FILLING AND PACKAGING EQUIPMENT.

ANIMAL ROOM FOR PYROGEN AND TOXICITY TESTS.

SPECIAL DIVISION FOR SUPPLEMENTAL DEVELOPMENT WORK INCLUDING PRODUCT LITERATURE.

We're equipped to manufacture injectables, tablets, capsules and other oral products. May we show you how the simplicity of dealing with us can save you time and money.

CAPSULES
TABLETS
INJECTABLES

PHILADELPHIA AMPOULE LABORATORIES, INC.
400 Green St., Philadelphia 23, Pa.

PAL

Food Additives Future: Extensions, Experts

—Continued from page 3

which the producer is ready to go forward now, with the idea of amending the petition later. A food additive regulation, once issued, is not a static document.

• FDA Enforcement. Commissioner George Larrick reported that the job confronting the agency is too big to be handled properly with the limited facilities available. "We believe it is time for a new Citizens Advisory Committee to look at our total operation and give us current advice on the steps that should be taken to cope with the current problems."

Deputy Commissioner John L. Harvey told the conference that the entire legislative program of the FDA is clouded by the fact that a new administration is coming into office, which will naturally have the deciding voice in legislative activities of the agency.

Sees Need For More Time

But he added that "we are all agreed within the FDA of the apparent need for some extension of time on the effectiveness of the food additives amendment and we are also agreed that the FDA should present the legislation." The legislation, he stated, will be grounded on these principles:

• That an extension of the effective date for any given product is necessary and that the product involves no undue hazard to health.

• That the scientific work of clearing a product for safe use shall have been started and cannot be completed by March 6.

• That FDA is given a complete understanding of the scientific work being done on a product and is kept informed of its progress.

If given the green light by the incoming administration, Mr. Harvey indicated that FDA will also renew its recommendations to congress on the legislation that failed to get enacted last year.

These include bills for broadening FDA's factory inspection authority, tighter controls over barbiturates and a change in the Delaney clause to permit substances capable of producing cancer to be included in animal feeds when there is no evidence that they will produce cancer in the animal or be transmitted to man.

Cosmetic Bill May Be Ready

He also indicated that FDA may be ready with a bill for the pre-testing of cosmetics in the new congress. The present thinking in the agency on this subject, he added, is to follow the pattern of the new drugs law to show safety and to require that the end product must meet safety tests even though the ingredients might be considered safe when considered separately.

The chemical industry's plans for amending the food additives law were given to the conference by Dr. Richard S. Gordon, director of research of the agricultural chemicals division of Monsanto Chemical Company, St. Louis, Mo. Dr. Gordon was speaking for the food additives committee of the Manufacturing Chemists' Association.

He indicated that the chemical industry has come around to favoring establishment of a panel of experts to consider problems under the Delaney clause, because of the experiences of industry in the two and one-half years since the food additives amendment was passed. Originally, the chemical industry opposed the idea of a scientific committee.

As a result of the cranberry episode, FDA's actions against arsenicals, stilbestrol, and emulsifiers—and the Kistiakowsky recommendations that government research be expanded to find safer and more effective pesticides—he stated that the climate is such as to hamstring what was essentially an excellent piece of legislation in the public interest.

He said that FDA's interpretations of the Delaney clause becloud administration of the entire food additives amendment by creating a climate of extrapolation and requirement for proof of a negative. He referred specifically to FDA's actions against organic arsenicals, stilbestrol, and against one of the emulsifiers for use in bread.

In the case of the emulsifier, administrative clearance was denied because, when used in an animal diet at 250 times the proposed use in man, a metabolite of the material crystallized out of the urine causing kidney stones or material which acted as nuclei for the formation of bladder stones which in turn can lead to bladder tumors, which in turn, may occasionally be malignant.

Is It 'Splitting Hairs?'

"At the risk of seeming to split hairs," Dr. Gordon said, "in the case of something that may create an imbalance or an adverse physical effect where the imbalance or effect may result in a hyperplasia or even a well-defined change which in turn could lead to a non-reversible change, is the material itself rather than the imbalance or secondary physical effect to be called the carcinogenic event?

"Presumably, every chemical known to man can be shown to be irritating at some level, and therefore, could be considered, under one conceivable but hardly logical approach, a potential carcinogen."

He recommended that the law be amended to provide for a scientific panel charged specifically to assist in the evaluation of the scientific evidence appropriate to the proposed use of the chemical in question, rendering an opinion on the safety of that use without being limited only to naming a series of events as "carcinogenic."

HORMONES

DEHYDROCHOLIC ACID, N.F.
(Oral and Injectable Grades)
OX BILE USP
DRIED OX GALL POWDER

We invite your inquiries

GEDEON RICHTER
PHARMACEUTICAL PRODUCTS INC.
20 Exchange Place, New York 5, N. Y.

P&B

BERYLLIUM • LANTHANUM • CERIUM
THORIUM and ZIRCONIUM SALTS • AMMONIUM BIFLUORIDE
TITANIUM POTASSIUM OXALATE

ABSORPTION BASE • CHLOROPHYLL • LANOLINE, U.S.P. • SAPONINE

BIOLOGICAL STAINS • ph BUFFER SOLUTIONS
"FIXANAL" CONCENTRATED PREPARATIONS FOR NORMAL SOLUTIONS
MOLDOL (Preservative)

Since 1900 Pfaltz & Bauer, Inc.
EMPIRE STATE BUILDING, NEW YORK

stanley blackman labs., inc.
so. hackensack, new jersey

PURIFIED PAPAIN

N.F.-100 AND 350 UNITS

Rutin N. F.

Diamond 3-3525

Combos Commanding 20 Percent Of 500-Million-Lb. Bar Soap Mart

Combo bars have another vote of confidence from the chemical industry. Stepan Chemical Company, in declaring a 5 percent dividend last week, also announced that the company has been working on a new additive to bar soap with a number of potential customers. The new product, trade-named "LSD," is a lime-soap dispersant which the company says is fully developed and is currently undergoing additional testing by some of the big soapers. Stepan expects to reach commercial stage with the product sometime in 1961.

The combo bars (combination soap and synthetic detergent) have been gaining in popularity for the past four years. Some industry sources say they may have as much as 20 percent of the 500-million-pound bar soap market and the trend is expected to continue upward.

Projections For Detergent Bars

One report has it that 80 percent of bar soaps will eventually contain some detergent and that average syndet content in the bar will be 10 to 20 percent.

However, big soapers doubt the combo bar-soap bar ratio will reach the current 85 percent syndets to 15 percent soaps figure. They can't see a switch in formulation of such perennial soap favorites as "Ivory," "Lux" and "Camay" or the combo bars moving in on them in force.

Further, veteran observers point out these bars have a sloughing problem to contend with and say that they are premium-priced (5-10 cents over straight soaps.).

Stepan feels products like "LSD" are at least a partial answer to the premium price of combo bars. Company spokesman say the additive will make it possible to produce a product that is only nominally higher than ordinary soaps.

The company is banking on more widespread acceptance of products which feature the best properties of soaps and detergents.

Another possible solution to the high cost of combos would be increased use of the large-volume, low-cost alkyl aryl sulfonates as the detergent component of a combination bar.

But this is unlikely, say trade sources, since "kindness to hands" is a property even more important in consumer products than is low cost. The bar market for alkyl aryls is, and will remain, in the formulation of products for military and institutional use.

Igepons Widely Used in Combos

Those detergents most successful in the combo market have been the fat-derived ones because of their similarity to the "feel" of soap and their non-irritant properties. And in this group, Antara Chemical's "Igepons" probably have the biggest share of the market.

Lever Brothers Company's "Praise"—on the market less than a year—boasts a "magic" ingredient, "Dermacil," which is an "Igepon."

"Dove," also marketed by Lever, is 10 percent soap, 25 percent stearic acid and the balance an "Igepon" detergent. The product, which was test marketed in late '55 and achieved national distribution in early 1957, boasts neutral pH for people allergic to alkaline soaps.

"Dove," with its boat-shaped contours leaves less surface, in contact with the soap dish, cuts down on sloughing.

Sloughing results from the water solubility of the detergent component of the combination bar. This could be reduced by use of a stearic-type "Igepon" instead of the coco-type now being used. However, this would result in lower foaming. As in most modified syndet formulations, some compromise has to be made.

Probably the front-running detergent bar is Procter & Gable Company's "Zest," although "Dove" is felt to be running it a close second now that P&G's initial advertising push has slackened.

"Praise" ranks third and "Vel Bar" (Colgate-Palmolive) and "Glad" (Armour & Co.) make up the balance of the market.

"Zest," marketed as essentially a 100 percent detergent bar, probably contains minimal amounts of whitening agent and skin emolients, according to trade reports. It is pointed out that a fully active detergent bar would exert a heavy degreasing effect on the hands.

DETERGENT BARS: MARKET LINE-UP

'Zest'	40 million lbs.
'Dove'	30 million lbs.
'Praise'	25 million lbs.
Others	*5 million lbs.
Total	100 million lbs.

Above sales figures for combo toilet bars are industry estimates

*Includes 'Vel Bar' and two brands now being test-marketed ('Glad' and 'Choice')

Antara feels the combo bars are not a flash in the pan despite the high mortality rate in the heavily competitive soap industry.

The company says the "Igepons" are a natural for incorporation into combination bars because of their similarity to soap without undesirable features such as hard water sensitivity.

This advantage, Antara points out, forms the basis for one of the main advantages of combination bars, seldom mentioned in TV advertising: elimination of scum formation in hard water.

"Igepon AC" and "TC" are derived from coconut oil acids. The company recommends "Igepon AC-78," "TC-42" and "TE-42" for use in detergent bars.

Used with soap or fatty acids, Antara says these products contribute detergency, lathering qualities, good lime-soap dispersion and rinsibility.

"AC-78," an ester-type "Igepon," is reported practically salt free, and both "AC-78" and "TC-42," an amide-type, are white and may be used to make white bars.

Chemically, minimum "Igepon" content of "AC-78" is 83 percent; sodium chloride, 0.8 percent maximum; sodium sulfate, 0.25 percent maximum; water, 1-2 percent and free fatty matter, 10 percent maximum. It is a white powder with a density of 0.7 to 0.8 at 25 degrees C. and pH in 10 percent solution is 7.0 to 8.0.

'Igepon' Offered in Paste Form

Minimum "Igepon" content of "TC-42" is 24 percent; sodium chloride, 5 to 7 percent; ash, approximately 2 percent; free fatty matter, 1 percent maximum and water, approximately 65 percent. This product is supplied as a white paste with density of 0.8 to 0.9 at 25 degrees C. and pH in 10 percent solution of 7.0 to 8.5.

In general, solutions of the ester-type "Igepons" should not be stored over long periods of time because they undergo hydrolysis. The amide-type in solution or slurry form is stable to storage. Antara recommends stainless steel, plastic, or lined tanks and vats to prevent pickup of color due to rusting.

Stepen Chemical, long involved in surface active chemicals, feels the growth pattern for combination bars will continue a steady upward trend. Surfactant chemicals already marketed by the company include the "Stepanols" sulfated fatty alcohols manufactured from straight chain alcohols, primarily lauryl.

The company also makes "Makon" nonyl phenoxy polyoxyethylene ethanol products and the "Ninol" alkylolamides as well as "Ninate" alkyl aryl sulfonates.

Blowing Agents

Canadian Industries Ltd. is on the point of start-up of a plant for production of nitrogen-type blowing agents.

The firm has acquired Canadian rights

—Continued on page 66

ORGANIC PEROXIDES

LUPERSOL® DELTA

A fast acting Methyl Ethyl Ketone Peroxide in Dimethyl Phthalate

FORM — Liquid PEROXIDE ASSAY — 60%

USE

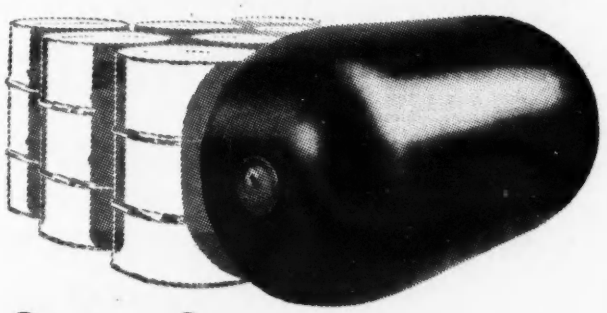
The fastest catalyst for room temperature curing of polyester resins.

LUCIDOL DIVISION

WALLACE & TIERNAN INCORPORATED

1740 Military Road, Buffalo 5, New York

Got a CHELATING need or question?



Consult HAMPSHIRE!

Here are three good reasons why:

1 Find out about nitrilo tri-acetic acid (NTA). This is a low-cost, high-potency amino acid chelating agent. Has 50% more chelating power than EDTA, can cut costs up to 30%. Made by Hampshire's new, patented process, NTA is ideally suited for water-treating and for synthetic detergent formulation. (Write for copy of "The Role of Chelating Agents in Detergent Compounds.")

2 Take advantage of Hampshire's specialized knowledge and expert technical service staff to be sure that you are using the chelating agent that is most economical and best suited for your product or process. Among the 19 chelates on Hampshire's Specification Sheet, there is one that is best for your application.

3 Let us show you how to use our new bulk package which permits any user of liquid chelating agents to take advantage of lower bulk prices without requiring costly bulk storage facilities.

Write for Hampshire's new Product Specification Sheet. At the same time, advise us of your specific problems and we will send additional pertinent literature. Here, in easy-to-read form you will receive important information that enables you to get the most out of your chelating dollar.

HAMPSHIRE CHEMICAL CORPORATION

Poisson Road, Nashua, N.H.

"PEDIGREED" PRODUCTS

Control numbers stamped on the labels of all MM&R products identify their "pedigree" through every stage of manufacture. It is your assurance of unexcelled quality, purity and uniformity.

MAGNUS, MABEE & REYNARD, INC.

The World's Most Famous Supplier of Essential Oils, Basic Perfume Oils, and Concentrated Flavors

16 DESBROSSES STREET • NEW YORK 13, N. Y.
221 NORTH LASALLE STREET • CHICAGO 1, ILL.

BROMINATED SESAME OIL
NATURAL SPICE OILS
NATURAL FLAVOR OILS

S. B. PENICK & COMPANY
100 CHURCH ST., NEW YORK 8
735 W. DIVISION ST., CHICAGO 10

PENICK
AROMATICS AND FLAVORS DEPARTMENT

ESSENTIAL OILS • PERFUME OILS • FLAVORS • AROMATIC CHEMICALS and ODOR MASKS
Proven Replacements For: BERGAMOT OIL, CITRONELLA OIL, ANISE OIL, CASSIA OIL
DOMESTIC EXPORT — YOUR INQUIRIES SOLICITED
D. W. HUTCHINSON & CO., INC., 700 South Columbus Ave., Mount Vernon, N. Y.
Founded 1896 — Telephone: Mount Vernon 4-7272

AEROSOL BOUQUETS
FLAVORING EXTRACTS
MASKING ODORS
for INDUSTRIAL PURPOSES

by Florasynth LABORATORIES, INC.
900 VAN NEST AVE., NEW YORK 62, N. Y.
Chicago 6, Los Angeles 21, and other principal cities in the U.S., Canada and Mexico

EUGENOL by FRITZSCHE

In the extraction of EUGENOL, we employ an exclusive process perfected by years of manufacturing experience. The result is a product measurably superior, both in odor quality and flavor to any competitive brand. We guarantee this superiority and will gladly supply trial samples for comparison tests.

FRITZSCHE BROTHERS, Inc.
76 NINTH AVENUE — NEW YORK 11, N. Y.
Branch Offices and *Stocks: Atlanta, Ga., Boston, Mass., *Chicago, Ill., Cincinnati, Ohio, Greensboro, N. C., *Los Angeles, Cal., Philadelphia, Pa., San Francisco, Cal., St. Louis, Mo., Montreal and *Toronto, Canada; *Mexico, D. F. and *Buenos Aires, Argentina. Plants: Clifton, N. J. and Buenos Aires, Argentina.

Essential Oils, Aromatics

Big news of the week is the $1.40 per pound price advance in spearmint. Cedarwood advanced 30 cents per pound and 22-24 percent Lavandin advanced 2 cents per pound. Grapefruit, already a weakening market, declined $1 per pound; Bourbon vetiver declined 25 cents per pound and Haitian vetiver declined $2 per pound. Dealers report moderate activity and general firmness in other markets.

Hoping to improve export returns from spices, India has set up an Export Promotion Council. This news comes from the Canadian Department of Trade and Commerce.

The council will have members from the central and state governments and from the trade in pepper, cardamom, turmeric, ginger, chillies and minor spices.

Essential oil dealers report that the Food Drug Administration's ban on safrol and oil of sassafras is a mere formality as far as their operations are concerned.

For months the American Bottlers of Carbonated Beverages has been encouraging its members to switch over to other products for flavoring their root beer and related drinks. (Bottlers of carbonated beverages were formally the largest users of safrol and oil of sassafras.)

One dealer reported that he had not bought any oil of sassafras for considerably more than a year and that occasionally he fills an order for five pounds of material.

The price quoted in OPD is $1.45 per pound, but this is not a true picture of the market. Many dealers no longer handle material and those who do, sell such small quantities that the price factor is insignificant. A trade source said he was offered material from a North Carolina source for $1 per pound, which is approximately half what it costs the seller to produce it.

"The market for oil of sassafras is falling apart," one dealer said, "as is the market for safrol."

Safrol is now priced at 65 cents per pound whereas just last year it was 80 cents per pound.

Products that are now being used in place of safrol and oil of sassafras are oil of sweet birch and oil of wintergreen. Manufacturers of soft drinks and root beer-flavored candy report that there has been little customer reaction to the switch.

Price Trends

Advanced

Cedarwood, 30c. per lb.
Lavandin, 22-24 percent material, 2c. per lb.
Spearmint, $1.40 per lb.

Reduced

Grapefruit, $1 per lb.
Vetiver, Bourbon, 25c. per lb.
Haitian, $2 per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 4, 1959
145.72	145.50	145.56	146.70

For Current Prices see Page 10

Essential Oils

Cedarwood—From its previous price, 70 cents per pound, cedarwood has advanced to $1 per pound. Some companies are charging even more for their material and some have withdrawn offers altogether.

Geranium — Material from both Algeria and the Reunion Islands remained at its previous listing. Algerian remained at $22 per pound and Bourbon material remained at $26 per pound.

Grapefruit—The market continues to weaken. From its previous price, $4 per pound, it has declined to $3 per pound. The average price around New York, however, seems to be about $3.75 per pound.

Lavandin—The 22-24 percent material, in drums, has been reduced in price from its previous level, $1.10 per pound, to $1.08 per pound.

Abrial material remains at its previous level, $1.12 per pound. Reports are, however, that the market is quite firm.

Orange—According to the Food & Drug Administration, a public hearing will be held January 30 on the proposed new standards for commercially packed orange juice products to consider question on the use of optional ingredients and whether the juices are to be labeled by their common or usual name.

Among the optional ingredients proposed to be written into the standards are orange oil and orange essence.

The reason the hearing is being held is because of objections that have been raised to provisions dealing with optional ingredients and the labelling of the juices as proposed in the standards published last March.

Sandalwood—Materials is said to be available at $21 per pound although the market is quite firm. Most dealers are charging upwards of $23 for their sandalwood.

Sassafras — Soft drink manufacturers have been cautioned not to use sassafras in their products. The following statement is from the offices of the American Bottlers of Carbonated Beverages.

"If you are among that isolated minority of industry members who have disregarded earlier warnings and advice concerning the need to discontinue use of safrol (oil of sassafras), this is your last chance to act.

"The United States Food & Drug Administration has advised that the ingredient safrol has definitely and clearly been found not to be in compliance with the Federal Food, Drug and Cosmetic Act of 1938, as amended. Publication of the order officially banning the use of this ingredient in root beer, sarsaparilla, birch beer, and other food and beverage products will follow. As a preliminary to issuance of the order, FDA agents from coast to coast checked 70 product samples—found 15 contained safrol.

"If the Beverage and Flavor industry—especially those manufacturers of root beer, sarsaparilla and birth beer—is to avoid unfavorable and damaging publicity such as that which developed with the 'cranberry incident' you must act immediately and with haste.

1. Stop all manufacture of products containing safrol.

2. Do not resume manufacture until you have definite assurance from your concentrate or flavoring supplier that the product being shipped you is safrol-free.

3. All products containing the ingredient must immediately be withdrawn from retail outlets, including vending machine and fountain operations or, any other sources distributing the product for consumption.

4. Any stocks—concentrate or flavoring materials, bottled or bulk finished goods, must be dumped. For your protection, it is recommended that this action be accomplished before a competent witness and so certified.

"We have heard of one of two instances where it was believed that finished goods, or inventories, could be used after issuance of the order. This is completely false. Finished goods and all stocks must be withdrawn and dumped, and use will not be permitted."

Spearmint—From its previous price, $6.60 per pound, spearmint oil has advanced to $8 per pound. Some dealers have withdrawn offerings of material due to its high replacement cost.

Thyme—Many dealers are reportedly charging over $3 for red and white material, but the low of the OPD range remains at its previous listing, $2 for red and $2.20 for white material.

Vetiver—Haitian material has declined from its previous listing, $14 per pound, to $12 per pound. Bourbon material declined from its previous listing, $17.25 per pound to an even $17 per pound.

Aromatic Chemicals

Ethyl Vanillin—As of January 1, spot prices of ethyl vanillin will be the following: 500 pounds or over packed in 100 pound drums, $6.75 per pound; 500 pounds or over packed in 25 pound drums, $6.85 per pound; 100 pounds or over packed in 100 pound drums, $7.40 per pound; 100 pounds or over packed in 25 pound drums, $7.50 per pound.

Vanillin—One manufacturer of vanillin has raised the prices of his material. As of January 1, it will be selling for the following amounts: 2,000 pounds or over packed in 100 pound drums, $3 per pound; 2,000 pounds or over packed in 25 pound drums, $3.10 per pound; 100 pounds or

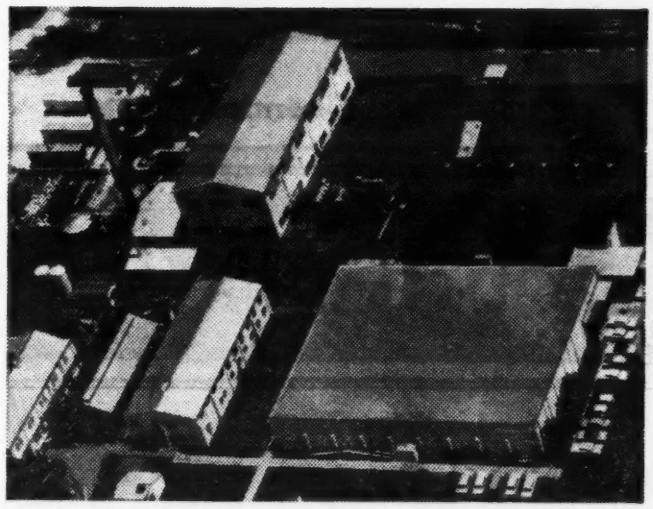
—Continued on page 60

ONLY MINUTE MAID® OFFERS 100% PURE CITRUS ESSENTIAL OILS FROM FLORIDA AND CALIFORNIA!

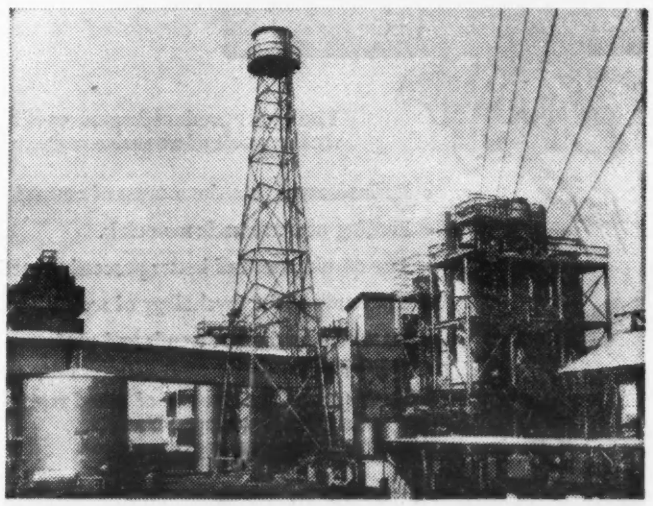
SUN-FILLED®

BRAND

Florida and California All-Valencia Orange Oils, Cold Pressed, U.S.P.
California Lemon Oil, Cold Pressed, U.S.P.
Florida and California Grapefruit Oils, Cold Pressed
Florida Lime Oil, Cold Pressed
Florida Tangerine Oil, Cold Pressed



Florida SUN-FILLED citrus oils are produced at 3 Minute Maid plants — Plymouth (shown above), Auburndale and Leesburg, Florida.



California SUN-FILLED citrus oils are produced at Minute Maid's Golden Citrus plant at Anaheim, California.

With extensive groves in Florida and California, Minute Maid is the *only* producer which gives you a choice of citrus essential oils from both of these great citrus-producing states. For example, Minute Maid offers *two* SUN-FILLED All-Valencia Orange Oils, Florida or California... both Cold Pressed, U.S.P., with true, rich Valencia Orange flavor, aroma and color.

All SUN-FILLED citrus essential oils are guaranteed 100% pure. You can use them with complete assurance because they're produced and packed under continuous U.S.D.A. inspection... completely protected against adulteration and sophistication by tamper-proof seals.

What's more, with SUN-FILLED citrus essential oils you're assured of highest quality. Minute Maid's strict quality control assures constant uniformity, batch after batch. When you buy SUN-FILLED you buy the very best! And you're always sure of ample, dependable supply from Minute Maid—America's largest producer of citrus products.

SUN-FILLED citrus essential oils are shipped in 35-lb. tins and 385-lb. drums. Write us now for free samples!

BOTTLERS AND BEVERAGE BASE MANUFACTURERS

Send for our free 4-color brochure on SUN-FILLED citrus essential oils and beverage concentrates. They're unmatched for adding true citrus fruit flavor, aroma and color to soft drinks!

CITRUS PRODUCTS DIVISION

MINUTE MAID CORPORATION
Orlando, Florida
New York, N. Y.: 420 Lexington Avenue • ORegon 9-8755

Oil of Nutmeg U.S.P.

ESSENTIAL OILS
PERFUME BASES
AROMATIC CHEMICALS
FLAVORS &
FLAVOR MATERIALS

FELTON CHEMICAL COMPANY, INC.
599 JOHNSON AVENUE, BROOKLYN 37, N. Y.

FELTON

Write for Samples

MUSTARD FLOUR

ALL GRADES
FOR FOOD, AND
MEDICINAL USE
Special for Mayonnaise

Old Dutch Mustard Co., Inc.
Manufacturers
88 Metropolitan Ave., Brooklyn 11, N. Y.
Phone: EVergreen 7-9156

Your Postmaster, **Robert K. Christenberry**

Suggests:

AVOID THE AVALANCHE OF CHRISTMAS HOLIDAY MAILINGS
SPEED BUSINESS MAIL
MAIL EARLY IN DECEMBER

For Distant OUT-OF-TOWN POINTS,
MAIL BY DECEMBER 10, 1960

For Delivery in **THE NEW YORK CITY** and **METROPOLITAN AREA,**
MAIL BEFORE DECEMBER 16, 1960

OPD Quickest way to keep current on Chemical Costs

FLAVORS **PFW** SCENTS

POLAK'S FRUTAL WORKS INC., MIDDLETOWN, N. Y.

Fragrance and Research

The better product fragrances of today are the result of extensive research . . .

- Basic research into the sources of natural fragrance.
- Finding new aromatic materials.
- The development of better processing methods.
- The study of the psychology of scent.
- An understanding of trends and preferences in perfumes.

With this sound background of broad research in many areas, van Ameringen-Haebler can better serve your fragrance needs.

FACILITIES TO SERVE THROUGHOUT THE WORLD

ARGENTINA, AUSTRIA, BELGIUM, BRAZIL, CANADA, ENGLAND, FRANCE, GERMANY, HOLLAND, INDONESIA, ITALY, NORWAY, SOUTH AFRICA, SWEDEN, SWITZERLAND

Alva FLAVORS

for basic good taste in pharmaceuticals and foods.

IFF van Ameringen-Haebler division
INTERNATIONAL FLAVORS & FRAGRANCES INC.
521 West 57th St. • New York 19, N. Y.
Leading Creators and Manufacturers in the World of Fragrance

Essential Oils

—Continued from page 58

over packed in 100 pound drums, $3.30 per pound; 100 pounds or over packed in 25 pound drums, $3.40 per pound.

Seeds and Spices

Cloves—The general market remained relatively stable with only one price change. Madagascar material declined in price from its previous high 37 cents per pound to 36 cents per pound. Zanzibar material remained at its previous level.

Pepper—Once again the black and white pepper markets declined.

From its previous high, 53 cents per pound Malabar black declined to 49 cents per pound; from its previous high 53 cents per pound, Lampong black declined to 49 cents per pound, and from its previous high, 75 cents per pound, Muntok white declined to 74 cents per pound.

From the Foreign Agriculture Circular, published by the United States Department of Agriculture, we excerpt the following information about 1959 production of pepper in Indonesia.

Production since 1956 has been at a high level, undoubtedly due to postwar replanting and rehabilitation programs. The stimulus for this type of program was provided by good prices for pepper through 1954.

Production during 1959 is preliminarily estimated at 72.2 million pounds, 13 million pounds more than the revised 1958 estimate.

The bulk of the 1959 crop was black pepper, 62.5 million pounds, and 9.7 million pounds of white pepper. Comparable figures for 1958 were 50.8 million pounds of black and 8.4 million pounds of white pepper.

Production of white pepper during 1960 may rise, since the price spread between black and white has increased.

Reports from the main black pepper producing area in Indonesia, Lampong, indicates that pepper gardens are being well maintained and that while plant disease remains the number one enemy of pepper, the incidence of it is regarded as normal.

One aspect of the Indonesian pepper situation that cannot be evaluated at this time, is the effect the recent nationalization of the Chinese retailers in rural areas will have on pepper production.

Much of the credit advanced to growers was provided by these Chinese merchants and whether the government will be able to fill this void with cooperatives, is not known.

However, since much of the Indonesian crop apparently leaves the country through contraband shipments to Singapore, production during 1960 may not be affected.

It is expected that production in Indonesia will continue to increase as the strong demand for Indonesian pepper has revived interest among the growers who are maintaining their gardens in better condition, and harvesting older plantings more intensively.

Vanilla Beans—Prices remain at their previous level on spot, which are: Bourbon material, $8.25 per pound; Mexican cut material, $8.50 per pound, and Mexican whole material, $9 per pound.

The market is said to be firm, mainly as a result of action taken by the price stabilization board in Madagascar. Trade source on spot reported that the stabilization board, which issues licenses for material that is to be shipped out of the country, has raised the minimum price for export material.

Ferrocene 'Hot Stuff'

—Continued from page 5

housekeeping" within minutes after he lands on other planets.

Easily transportable, this material could be fabricated into shelter and furniture, which, in the reduced gravity of space, would perform as well as would a much sturdier material on earth.

Experiments by the Air Research & Development Command are said to have turned up several satisfactory methods of on-the-spot molding, including the use of silica gel catalyst containing trimethylamine.

The silica gel technic was found to release the necessary ingredients at a controlled rate.

Another use for the plastic would be as a thin coating on the exterior of a long-term orbiting manned satellite, where it would help absorb the energy of meteorite particles. It would also be possible to color the foam to achieve a measure of temperature control, a bulletin from the Air Force points out.

CONSULTANT: Philip Chaleyer, internationally known perfumer and expert in aromatic products, who will serve as a special consultant to Rhodia, Inc., New York.

Phosphate Process Licenses Offered by Caribbean Firm

Caribbean Chemical & Fertilizer Company reports it now holds exclusive licensing rights for "Facerform" processes throughout Asia.

The company, headquartered in Freeport, Grand Bahama Island, says it has been granted a license which includes the right of sub-license within the area covered—starting with Turkey and extending to Japan.

"Facerform" processes are basically concerned with the conversion of insoluble phosphate in rock to available form, using sulfuric, phosphoric or other mineral acids.

NOW... double protection with

LEVER-BOLT RINGS

for quick, air-tight closure of full removable-head drums

1. Apply ring to drum.

2. Clamp lever in place, insert bolt and apply nut.

3. Tighten bolt for finished job.

JUST 3 QUICK-EASY STEPS

As shown above, just 3 simple steps give you the most secure drum closure available. The new Drum Parts Lever-Bolt Ring provides not one, but TWO independent means for locking the cover securely on the drum: (1) the lever-lock, for a quick and generally adequate closure, and (2) the nut-and-bolt, providing a positive seal in transit.

Gain simplicity, speed and more security. Specify Drum Parts LEVER-LOCK Rings for your full removable-head drums . . . additional cost is amazingly low.

NEW CATALOG contains descriptive details on all Drum Parts closure devices. Write for your copy today.

DRUM PARTS, INC.
10311 MEECH AVE. • CLEVELAND 5, OHIO

Petroleum Derivatives

The thirty-day notification deadline for first quarter 1961 price changes passed uneventfully last week. Only alteration of note occurred shortly before Dec. 1 as petroleum suppliers of toluene hastened to adopt the f.o.b., freight equalized terms announced two weeks previously by the lead company. While the 25 cent-a-gallon price for toluene remains in effect and has no influence on the price index, consumers will be paying more for toluene and producers will reap more profits due to the shift in delivery terms.

On other fronts prices hold steady. A year ago benzene shot up 3 cents-a-gallon as the result of tight supply. Today production is running 100 million gallons ahead of last year and demand still outstrips available material. Tight supply persists, yet no price increase has been declared for the new year. Trade observers opine that fear of an over-supply situation late in '61 is the reason for freezing the price at the current level. At mid-year additional pertoleum benzene plants are expected to start coming on stream and steel is predicted to return to respectable levels adding material from that source. Effect of the swelling ranks of benzene suppliers could be oversupply and eventually a reduction in prices. So, think trade sources, the 34 cents-a-gallon price will be maintained so as to not make the field any more attractive than it presently appears.

Production of natural gas liquids, daily average output of liquefied gases and daily average demand for natural gasoline all went up in September. Demand for liquefied gases for fuel and chemical uses dropped. That's the tally of Bureau of Mines' Monthly Natural Gas Liquid Report for September. According to the Bureau:

- Natural gas liquids production was 8 percent above September a year ago.
- Daily average production of liquefied gases at refineries was 7.8 million gallons, 15 percent above September, 1959.
- Ethane-ethylene production in September was 22 percent above the same month last year.
- Daily average demand for natural gasoline was 12 million gallons, an increase of 7 percent from September, 1959.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 4, 1959
103.74	103.74	103.74	103.04

For Current Prices see Page 10

Aromatic Solvents

Benzene—Supply through September thils year from domestic sources is 100 million gallons ahead of the volume turned out last year in the same nine month period.

Despite the great advance in capacity, supply remains tight due to vastly increased demand.

Where has all the benzene gone? Some of it went into the 1,331 million pounds of styrene produced this year through September. Last year in the same period output was 1,030 million pounds. Some of the increased benzene went into the 557 million pounds of phenol turned out in the same period that last year saw only 492 million pounds produced. Some of the benzene went into detergents as dodecylbenzene production was rated at 365 million pounds in the period January-September this year compared with 346 million pounds in the same period last year. Some of the benzene output registering 449 million pounds through September this year in the first nine months. Exports claimed 17 million gallons of benzene through September while only 5 million gallons left US ports last year.

Almost all of the chemicals employing benzene as a building block zoomed this year so that increased supply disappeared as soon as it became available.

Most experts feel the tight supply situation will ease about the middle of next year as additional petroleum plants come on stream. One such announcement was made last week confirming a story earlier this year (OPD 8/1/60) that a 30 million gallon plant would be built at Port Arthur, Tex. Cokeoven supply of benzene is expected to perk up, too, as a predicted steel upturn at mid-year will bring forth more material from that source of supply.

Production of benzene in September from all sources totaled 35,393,386, gallons, an increase of 209,254 gallons from August. By source material was supplied as follows:

Petroleum processors—26,539,720 gallons, or 75 percent of the month's total, up 1,064,736 gallons from August.

Cokeoven operators—8,106,724 gallons, or 23 percent of the month's total, down 960,267 gallons from August.

Tar distillers—746,942 gallons, or 2 percent of the month's total, up 4,785 gallons from August.

Total benzene production in the nine-month period January-September totaled 342,452,091 gallons. In the same period last year 241,843,164 gallons were produced.

By source material was supplied as follows:

Petroleum processors—221.5 million gallons or 64.7 percent of total.

Cokeoven operators—110.4 million gallons or 32.3 percent of total.

Tar distillers—10.3 million gallons or 3 percent of total.

Toluene—Terms for toluene from petroleum sources is set at 25c. a gallon, f.o.b., freight equalized. No move has yet been made by cokeoven sources although a similar announcement is expected before Dec. 15.

Sources report high prices prevailing in the export area of the market. Material is known to have moved at 18½c. a gallon and there are unconfirmed reports of toluene moving into export for 19c.

Toluene production in September dipped to 23,636,364 gallons after recording 25,464,855 gallons in August.

Petroleum processors reported output of 21,374,802 gallons, a decrease of 1,499,744 gallons from August.

Cokeoven operators produced 2,003,775 gallons as compared with 2,364,215 gallons in the previous month.

Tar distillers recorded 257,787 gallons in September, a decrease of 30,893 gallons from August.

Total production in the period January-September this year was 200,405,724 gallons as compared with 182,610,436 gallons in the like period last year .

Xylene—Production of xylene in September dropped to 27,762,899 gallons after hitting 28,773,883 gallons in the month before.

Miscellaneous

Current reports of the industry for the week ended November 18, 1960 indicate an increase in crude-oil production and an increase in crude runs. According to the API, the daily average output of crude (including lease condensate) was 6,968,000 barrels, an increase of 13,000 barrels from the preceding week. Daily average crude runs to stills of 7,987,000 barrels were 270,000 barrels above the preceding week, and 30,000 barrels below the week ended November 20, 1959. Runs of foreign crude amounted to 965,000 barrels daily, compared with 1,066,000 barrels in the preceding week. For the four-week period ending November 18, crude oil production averaged 6,921,000 barrels daily, and crude runs to stills averaged 7,867,000 barrels daily with runs of foreign crude averaging 1,031,000 barrels daily.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended Nov. 19 totaled 237,036,000 barrels, according to data reported by the Bureau of Mines, compared with the total of 235,646,000 barrels for the preceding week. This represents an increase of 1,390,000 barrels, comprising an increase of 1,125,000 barrels in stock of domestic crude and an increase of 265,000 barrels in stock of foreign crude.

SHELL PLASTICIZERS
AND
RUBBER EXTENDERS

SHELL
DUTREX®

SHELLFLEX

SHELL OIL COMPANY
50 WEST 50TH STREET, NEW YORK 20, NEW YORK
100 BUSH STREET, SAN FRANCISCO 6, CALIFORNIA
SHELL

LABORATORY RESEARCH / FREE TECHNICAL ASSISTANCE / REFINING EXPERIENCE / STRATEGICALLY LOCATED
USE THESE BARECO FACILITIES WAREHOUSE STOCKS AND SALES OFFICES / WAX SAMPLES / DESCRIPTIVE LITERATURE

to help you with these
LAMINATING / COATING / WATER-PROOFING / LINING / COMPOUNDING SEALING / POLISH FORMULATING
MICROCRYSTALLINE WAX APPLICATIONS
INK MAKING / ELECTRICAL INSULATING... AND MANY OTHERS.

JUST WRITE OR CALL US. Tell us about your product, your problem and the wax characteristics you're looking for. We'll send you samples and/or recommendations. We'll even produce a "new" wax for you, if your product needs so indicate. And there's never any cost or obligation for any or all of these services.

25th Anniversary 1935 1960

PETROLITE CORPORATION
BARECO WAX Company DIVISION
SALES OFFICE: 917 Enterprise Building, Tulsa 3, Oklahoma

DISTRICT SALES OFFICES:
NEW YORK—150 East 42nd Street
CHICAGO—332 So. Michigan Ave.
ARDMORE, PA.—119 Coulter Ave.

SALES AGENTS:
GILBREATH CHEMICAL CO.
383 Brannon Street, San Francisco
ATLANTIC CHEMICAL & EQUIPMENT CO.
874 Ashby, N.W., Atlanta, Ga.

CELLULOSE ACETATE / CELLULOSE ACETATE BUTYRATE / CELLULOSE ACETATE / CELLULOSE ACETATE BUTYRATE

Eastman
CHEMICAL PRODUCTS, INC.
Subsidiary of Eastman Kodak Company
KINGSPORT, TENNESSEE

CHAS. L. READ & CO., INC.
30 JOURNAL SQUARE, JERSEY CITY 6, N. J.
Phone: NEW JERSEY OL. 6-2626 NEW YORK WO. 4-1131
THE GREATEST NAME IN TURPENTINE
GUM SPIRITS • STEAM DISTILLED • SULPHATE

OPD
Quickest way to keep current
on
Chemical Costs

TRY
PLASTOLEIN®
PLASTICIZERS

Emery doesn't make a plasticizer for every use, but the low temperature, polymeric and epoxy types that they do produce are highly regarded and widely used by quality vinyl plastics manufacturers. The big reason for Plastolein popularity: they produce a better product, particularly when special characteristics are important.

That's why difficult performance problems are welcome at Emery. "Tough ones" offer the best opportunity to prove the special merits of Plastolein plasticizers.

Write Dept. O for 32-page Emery-facts titled "Plastolein Plasticizers."

Organic Chemical Sales Dept.

EMERY INDUSTRIES, INC.
Carew Tower, Cincinnati 2, Ohio
New York • Philadelphia • Boston • Chicago • Cleveland

West Coast: Vopcolene Division
5568 E. 61st Street, Los Angeles 22, California
Warehouse stocks also in Baltimore and Buffalo
In Canada: Emery Industries (Canada) Ltd., 639 Nelson Street, London, Ontario • Export: Carew Tower, Cincinnati 2, Ohio

Coatings Materials

Prime pigment listings will be increased an average of five cents per pound effective January 3, by at least one leading producer. Two other producers are reported ready to announce comparable price changes for their pigments. In the one new listing that has crossed this desk, increases are scheduled for alkali blues, both flushed and dispersed, as well as the red and maroon colors and the pigments of violet, green, blue and orange.

With the announcement of the new listings, producers report that demand for the colors picked up and is expected to remain at a high rate at least until the January 3 deadline.

Some of the new prices are: $1.03 per pound for all standard grades of the calcium lithols and lithol maroons; $1.30 per pound for Lake Red C; $1.50 per pound for orthonaline orange; and $2.45 per pound for dry toner alkali blue.

In the coatings' spot markets, strengthening of the foreign markets for shellac is reported. The stronger position of shellac is felt to be the combined result of a poor Lac crop this fall and the large-scale buying on the part of Communistic China. Trade sources report that domestic shellac prices are fairly safe from any changes at this time, provided the strengthening trend in the foreign market does not extend to far into the future.

Casein demand continued to be quiet for the week ending December 2. Sources report that Argentine is being quoted at about 17¼ to 17¾ cents per pound, somewhat easier than last week. Spot Australian, when available, is about 22½ cents per pound, with material for March arrival at 20¾ to 21 cents per pound. Polish casein continues in the range of its Argentine equivalent.

Synthetic Resins

The following figures show production in pounds for September and list August figures for comparison, as reported by the Tariff Commission:

Production

	August	September
Phenolic and other tar acid resins:		
Molding resins	15,369,519	15,718,142
Laminating resins	6,036,711	6,773,935
Protective coating resins, modified, unmodified, except by rosin	2,026,902	1,933,941
Urea and melamine resins:		
Protective coating resins, straight modified	2,912,800	2,779,779
Styrene resins:		
Protective coating resins, straight modified	5,595,190	5,319,772
Vinyl resins:		
Total all types	94,675,340	96,835,073
Alkyd resins for protective coatings:		
Phthalic anhydride types, unmodified	20,820,229	20,966,027
Modified with tar acids, rosin and/or other material except styrene	6,070,571	6,457,567
Polybasic acid types except phthalic:		
Unmodified	632,263	425,597
Modified with tar acids, rosin and/or other material except styrene	836,754	636,129
Rosin modification for protective coatings:		
Rosin, rosin esters, unmodified (ester gums, esterified with glycerol)	1,031,422	1,163,811
Esterified with other alcohols, pentaerythritol, glycols, etc.	838,963	908,583
Modifications with phenolic and other tar acid resins	2,108,502	2,192,081
Modifications with maleic and fumaric acids	2,724,886	2,795,705
All other modifications	4,178,893	4,093,428
Coumarone-indene and petroleum polymer resins	21,216,721	20,066,079
Miscellaneous plastics and resin materials	24,911,510	21,164,717

* Revised.

Prime Pigments

Aluminum Paste and Powder—The marmarket for the paste and powders continues to be satisfactory without any reported change in over-all market conditions. Listings for both the paste and powders are unchanged, with supplies described as adequate for all needs.

Carbon Black—Production of carbon black in October was 8.5 percent below the corresponding month of 1959, reports the Bureau of Mines. Shipments decreased 8.4 percent from October of a year ago, with stocks decreased 2 million pounds in October.

Total production was reported at 154,589,000 pounds, bringing the cumulative production for the year to 1,734,149. Last year, the total amount for January-October was placed at 1,623,788 pounds.

Shipments in October totaled 156 million pounds, compared to 157 million in September. The total shipments for the January-October period of this year was set at 1,665,981,000 pounds, while last year at that time shipments were established at 1,699,097,000 pounds.

Stocks at the end of October totaled 262,255,000 pounds, as against 264,608,000 pounds at the beginning of the month. Last year, at the end of October, stocks were held at 206,431,000 pounds.

Exports of carbon black during September amounted to 47,237,000 pounds, well above the previous month's reported total of 35,842,000 pounds. On the basis of the cumulative January-September exports, carbon black shipments to overseas points continued to be made at a rate that seems to belie trade predictions. At the end of September, exports of carbon black totaled 409,303,000 pounds, slightly above the mark set last year for the corresponding period. While it may be that the exports of carbon black has hit its peak, producers had felt that with the placing on stream of several overseas carbon black plants, exports from this country would fall off.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 4, 1959
111.26	111.26	111.26	103.10

For Current Prices see Page 10

Flushed & Dispersed Alkali Blue Bases—With the recent announcement by one leading paint materials producer, at least 10 grades of the flushed and dispersed alkali blues will be increased an average of 3 cents per pound. The increase becomes effective January 3 and will make listings for the alkali blues in lithol alkyd varnishes $1.48 per pound, alkali blues in mineral oil, $1.28 per pound, alkali blues in castor oil, $1.43 per pound and $1.30 per pound for alkali blues in lithol varnish. Escaping any price change on this listing are the strong alkali blues at $1.23 per pound.

Red and Maroon Colors—Effective January 3, several grades of the reds and maroons will be raised 5c. per pound, according to the recently announced price schedule for one leading producer. Lake Red C will go from the current $1.25 per pound to $1.30 under the terms of the new listing. Para reds will be boosted from the present $1.21 to $1.26 per pound. All standard grades of the lithol maroons will go from $0.98 to $1.03 per pound.

Violet, Greens and Blues—Also coming in for price increases are the alkali blues, green B pigments and methyl violets. Dry toner alkali blues will be boosted 7c. per pound to $2.45 per pound for all grades. Presscake alkali blues will go from $2.35 per pound to $2.42 per pound on all standard grades, dry basis. All standard grades of green B pigment will be increased 5c. per pound, making the new listing $1.55 per pound. Methyl violet (PMA) will be $2.95 per pound on January 3, or 5c. per pound higher than the current listing.

Yellow and Orange Pigments — The newly announced price schedule of one leading paint producer will make oranges (ONA) $2.45 per pound on all standard grades. Current listing calls for $2.38 per pound. Oranges (DNA) will be increased 5c. per pound, bringing the January 3 price to $1.61 per pound.

Lacquer Materials

The production of dibutyl phthalate in September, as reported by the Tariff Commission, slipped 17 percent compared to the previous month's output. August's production was placed at 1,408,149 pounds, as against 1,172,969 pounds during September.

The drop in production of dibutyl phthalate during September is felt to be the result of producers efforts to get more mileage out of their sorely-short stocks of naphthalene. Of all the phthalate esters, more naphthalene is required per pound of dibutyl than any of the other esters.

Coatings Materials

At present, dibutyl phthalate is reported to be moving well.

The shift in production to other forms of the phthalate esters is shown in the Tariff Commission's report on the output of dioctyl phthalates, which also includes di-n-octyl, di-isooctyl and di(2-ethylhexyl) phthalate and mixtures. Output of this phthalate ester group was estimated at 13,027,272 pounds in September or 18 percent above the previous month. August's production was reported at 11,028,120 pounds.

In September, tricresyl phosphate production slipped 24 percent in September as compared to the previous month's output. TCP in August was reported at 447,812 pounds. In September, output dropped to 340,414 pounds. In many trade circles it was hoped that despite its higher listing, some producers would shift to TCP as a substitute for the tight phthalate esters. The shift did not materialize.

Natural Resins

Shellac—Domestic market continues to be reported as steady, while the foreign market is said to be showing considerable strength. Sources report that the Fall Lac crop was not up to previous years. This poor crop, combined with large-scale buying on the part of Communistic China, has moved the foreign market into a much stronger position.

Domestic bleached shellac listings are felt to be out of any danger from foreign market influence provided the strengthening of the market does not proceed well into the future. On that basis, sources feel that the domestic prices for bleached shellac will hold. But they feel, the situation for range shellac may prove to be somewhat different, as listings for orange are felt to be more sensitive to foreign market movements.

Gums—With surface coatings formulators seeking ways to reduce costs, renewed interest is being shown in the gums as substitutes for some of the higher cost gums. The affect has been to firm market conditions for the gums. Listings are reported to be firm at the newer listings established last week.

Naval Stores

Carryover of stocks of rosin at the end of the current naval stores season, March, 1961, is expected to be at all time low, reports the US Department of Agriculture's Marketing Service.

Production for the 1960-61 season is expected to be up about 6 percent but greatly reduced carrying stocks should result in total supplies about 11 percent below those of a year ago.

A strong factor in the market is felt to be the increase in foreign consumption, rather than in the US. This trend is expected to continue.

Pine Gum—For the week ended November 18, the average price paid per standard barrel of commercial pine gum was reported at $41.80. Receipts of 17,300 barrels were 2,905 more than the same week last year. Weekly weighted averages were reported at $16.84 for WW, with no averages available for WG, N, M, or K.

Rosin, Gum
(USDA, per 100 lbs.)

	Fri. Nov. 25	Mon. Nov. 28	Tues. Nov. 29	Wed. Nov. 30	Thurs. Dec. 1
Drums—					
K	...	...	$14.17‡	...	$14.50§
M	...	...	...	...	14.50§
WW	$16.65	...	...	...	...
Bags—					
Tankcars (for week ended Dec. 2)—					
Sales, USDA				31	21§

New York
(Per 100 lbs., c.l., Friday)
K-M, $17; N, $17.10; WG, $18.10; WW, $18.25

Turpentine, Gum
(USDA, per gal., 7.2 lbs.)

Price	46½	46½	...	46½	46½
Sales	6,000¶	6,000¶	...	4,000¶	8,000¶

‡ Carlots. ¶ Gallons. † Or better. § Export.

Voluntary Health Insurance Backed by Doctor's Group

In a move to head off rising demands for increased government participation in medical aid plans, the American Medical Association voted last week to spearhead a drive toward a national system of voluntary health insurance.

Plans were immediately put in motion for conferences with officials of the National Blue Shield, the National Blue Cross and the American Hospital Association. Meetings also are planned with insurance companies offering health insurance policies.

Both the Blue Shield Association and the hospital group have been opposed to working with commercial insurance companies in the past because of the feeling that the insurance companies "skimmed the cream from the market." Dr. Donald Stubbs, Washington physician and chairman of the board of the National Blue Shield Plans, said that the nationwide movement should come from the Blue Cross and Blue Shield and then include other groups.

TRY JEFFERSON

ETHYLENE CARBONATE
PROPYLENE CARBONATE

These carbonates possess outstanding solvent properties for numerous polymeric and other relatively insoluble organic compounds. Their wide compatibility with many substances makes them excellent coupling agents.

Carbamates are formed easily with ammonia and aliphatic amines, leading to applications in agricultural chemicals, plasticizers and resins. To effect alkoxylation, these carbonates can be frequently substituted where the respective oxides are inconvenient to handle. They are also suggested as selective or extractive solvents for aromatic hydrocarbons; propylene carbonate finds uses in hydraulic and other functional fluids.

The purity of both products is in excess of 99% and truckload quantities are available on short notice. For technical information or samples, write Jefferson Chemical Company, Inc., 1121 Walker Avenue, P.O. Box 303, Houston 1, Texas.

JEFFERSON CHEMICALS

HOUSTON • NEW YORK • CHICAGO
CLEVELAND • CHARLOTTE • LOS ANGELES

098

SYNPRO STEARATES

- ZINC STEARATE USP, COSMETIC, TECH.
- ALUMINUM STEARATE (AI Types)
- CALCIUM STEARATE
- BARIUM STEARATE
- MAGNESIUM STEARATE USP, FGA Specs.
- CADMIUM STEARATE and others

20,000 lb. lots available for single shipments . . Also producers of aurates, palmitates, and others

SYNPRON stabilizers for Vinyl Compounds

SYNTHETIC PRODUCTS COMPANY
Since 1917
1636 Wayside Road, Cleveland 12, Ohio • Phone: KE 1-6010

OPD REPRINTS
35¢ A COPY

IRON OXIDES

DOP and DIOP

TITANIUM PIGMENT

OIL, PAINT AND DRUG REPORTER
Reprint Department
30 Church Street, New York 7, N. Y.

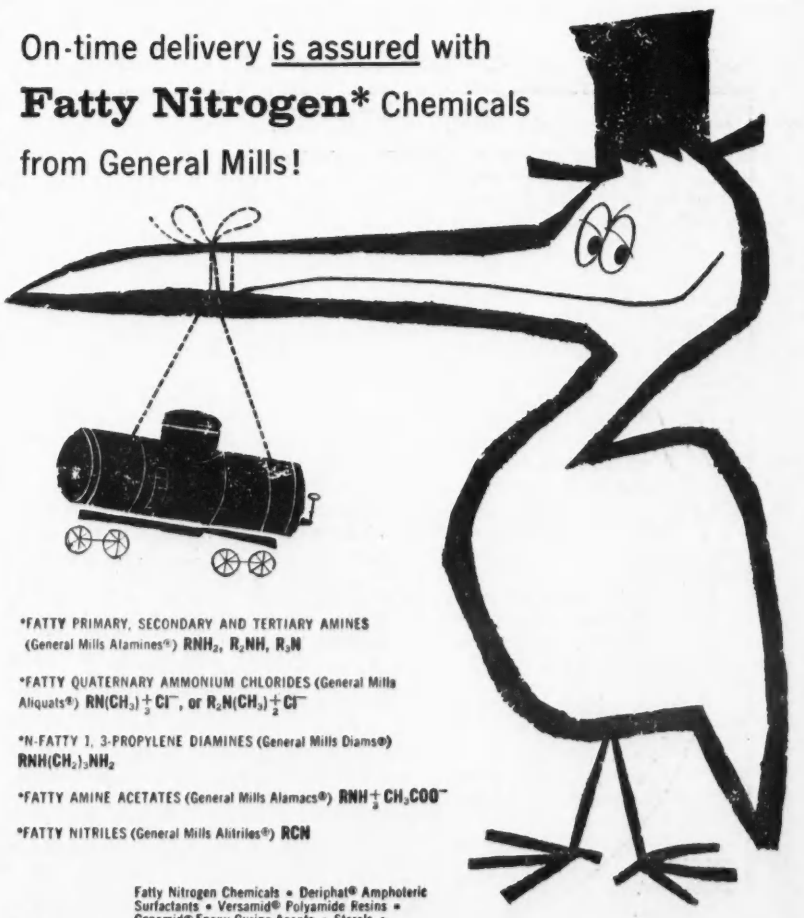
ULTRAMARINE BLUES

- Prompt deliveries through nationwide warehouses
- Complete range of types
- Experienced technical service

The Big Name in Quality Ultramarine Blues (formerly sold by American Cyanamid Company)

UNITED ULTRAMARINE & CHEMICAL COMPANY, INC.
149 Broadway, New York 6, N.Y.

On-time delivery is assured with
Fatty Nitrogen* Chemicals
from General Mills!



*FATTY PRIMARY, SECONDARY AND TERTIARY AMINES (General Mills Alamines®) RNH_2, R_2NH, R_3N

*FATTY QUATERNARY AMMONIUM CHLORIDES (General Mills Aliquats®) $RN(CH_3)_3^+Cl^-$, or $R_2N(CH_3)_2^+Cl^-$

*N-FATTY 1, 3-PROPYLENE DIAMINES (General Mills Diams®) $RNH(CH_2)_3NH_2$

*FATTY AMINE ACETATES (General Mills Alamacs®) $RNH_3^+CH_3COO^-$

*FATTY NITRILES (General Mills Alitriles®) RCN

Fatty Nitrogen Chemicals • Deriphat® Amphoteric Surfactants • Versamid® Polyamide Resins • Genamid® Epoxy Curing Agents • Sterols •

CREATIVE CHEMISTRY FROM GENERAL MILLS SERVES INDUSTRY WORLD WIDE

General Mills CHEMICALS
CHEMICAL DIVISION Kankakee, Illinois and Tlalnepantla, Mexico

SALES OFFICES: New York, Boston, Philadelphia, Charlotte, Cleveland, San Francisco, Houston, Los Angeles, St. Louis, Detroit, Kankakee.

Smith's
CHROMIUM OXIDE GREENS
nothing purer-the strongest, the best
GEO. B. SMITH CHEMICAL WORKS INC.
Maple Park, Illinois • Established in 1920

FATTY ACIDS

STEARIC ACID • OLEIC ACID
HYDROGENATED FATTY ACIDS
TALLOW FATTY ACIDS
HYDROGENATED GLYCERIDES
HYDROGENATED CASTOR OIL
12 HYDROXY STEARIC ACID

HARCHEM
CENTURY BRAND
HARCHEM DIVISION
WALLACE & TIERNAN, INC.
25 MAIN STREET, BELLEVILLE 9, NEW JERSEY
IN CANADA: HARCHEM LIMITED, TORONTO

AMERICAN MONTAN WAX

ALPCO
CONSIDER THAT
ALPCO WAX . . .
✓ is guaranteed to be uniform
✓ is free from import restrictions
✓ is price stabilized
✓ is stocked at convenient points
✓ is offered with technical advice
REFINED GRADES
(decolorized)
NOW
AVAILABLE
Produced in California by:
AMERICAN LIGNITE PRODUCTS COMPANY, INC.
IONE, CALIFORNIA
Sales Offices: 110 E. 42nd St.—RM 1211—New York City 17 & Ione, Calif.

"What a whale of a difference Sperm Oil makes"
SELF EMULSIFIABLE SPERM OIL
WERNER G. SMITH INC.
1730 TRAIN AVENUE
CLEVELAND 13, OHIO

THE EMERY
PREMIUM FOR
STEARIC & PALMITIC
USERS

FIVE GRADES, THREE FORMS—To meet your exact requirement, Emery furnishes five grades of stearic and palmitic acids, all available in flake form in palletized unit loads, some in cake or powder. COLOR AND COLOR STABILITY—Emersol Stearic and Palmitic Acids are unrivalled for their purity and whiteness and stability. Their outstanding resistance against heat darkening and rancidity make your products better . . . perform better longer. Emersol 132 Lily, a crystalline "triple-pressed" grade, is the finest stearic available. CRYSTALLINITY—Three of Emery's stearic acids (Emersols 132, 120 and 110) offer the added advantage of crystalline structure, with its inherent uniformity of composition. Emersol 140 meets the requirements of those that require high palmitic (70%) and Emersol 150 for high stearic (80%). UNIFORMITY—Emery's 24-hour Quality Control assures you that every order will meet rigid specifications. Emery's powdered stearic is the finest available, 99.5% through a No. 30 U.S. Standard Sieve. For full information on all five Emery Stearics, write for 24 page booklet, "Emersol Stearic Acids".

A LITTLE EXTRA EVERYTHING EXCEPT PRICE

FATTY ACID SALES DEPT.
Emery INDUSTRIES, INC., DEPT. O, CAREW TOWER, CINCINNATI 2, OHIO
Emery Fatty Acids: Stearic, Palmitic, and Oleic Acids, Hydrogenated, Vegetable, Castor, Tall Oil, Special Alkyd Grades, and Tallow Fatty Acids.
Emery Offices: New York • Philadelphia • Boston • Cleveland • Chicago • Vopcolene Division, Los Angeles • Ecclestone Chemical Co., Detroit • Emery Industries (Canada) Ltd., London, Ontario • Export, Cincinnati, Ohio.

Oils, Fats and Waxes

Edible oils were unsettled last week and declined from ⅛ cent to ¾ cent per pound. Buying interest lagged resulting in a weaker tone throughout the group. The biggest loss occurred in peanut oil because of increased production and sales took place at a decline of 1 cent. Corn oil dropped ¼ cent while cottonseed and soybean oils were slightly lower. Crude coconut oil also developed an easier tone and declined ⅜ cent reflecting the lower copra market which was off $5 per ton. Cottonseed and soybean foots were lower, declining ¼ cent per pound.

Weaker tone also was noted in tallow and greases. Soapers and specialty buyers showed little interest in replacements, and combined with slackened export demand affected the firmness of this market which prevailed during the past month. Quotations were more or less nominal for all grades.

While trading in industrial oils continued slow, prices ruled steady, except Brazilian castor and oiticica oils. A steadier tone prevailed in tung oil because of light stocks here and the higher cost of shipments caused sellers to reduce selling pressure. The only advance in this group took place in crude menhaden which was sold at an advance of ¼ cent per pound. Linseed oil was quiet, but was steadier with the advance of flaxseed. Brazilian castor oil was inactive and still shadable as was oiticica oil.

Soybean meal scored substantial gains as export business was active which cleared the market of pressing supplies. Unrestricted delivery advance $4.50 per ton. Cottonseed and peanut meals were lower because of slow demand and increased supplies. Peanut meal declined $1.50 per ton and cottonseed meal, $1 per ton.

Price Trends

Advanced

Menhaden oil, crude, ¼c. per lb.
Soybean meal, $4.50 per ton.

Reduced

Coconut oil, crude, ⅜c. per lb.
Copra, $5 per ton.
Corn oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Cottonseed meal, $1 per ton.
Cottonseed oil, crude, ⅛c. per lb.
Refd., ⅛c. per lb.
Grease, choice white, ¼c. per lb.
Peanut meal, $1.50 per ton.
Peanut oil, crude, 1c. per lb.
Refd., 1c. per lb.
Soybean oil, crude, ⅛c. per lb.
Refd., ¼c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Dec. 4, 1939
105.07	104.91	106.47	122.39

For Current Prices see Page 10

Vegetable Oils

Castor—Buying interest was confined to immediate requirements. Domestic grades were quiet and unchanged. No. 1 Brazilian was quiet and offered at 18¼c. per pound, tankcars, New York, prompt delivery.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week		2,480,000
Previous week	150,000	676,000
Corresponding week, 1959	220,800	2,000,000
Total this year	3,503,450	62,716,000
Corresponding period, 1959	24,569,800	90,772,000

Coconut—Crude was quiet and lower. Tankcars were offered at 12⅜c. per pound f.o.b. Pacific coast for immediate shipment with sales at 12¼c., late December and January. The New York was in active and nominal at 14c., tankcars, prompt delivery.

Corn—Market was easier and fractionally lower. Crude was sold at 13¾c. per pound, tankcars, f.o.b. mills, prompt delivery. Refined oil was quoted at 17.48c., tankcars, New York basis.

Cottonseed—Trading in futures was active on the New York Produce Exchange last week. Most of the activity was spreading with soybean oil sales. Market backed and filled, closing fractionally lower especially in deferred deliveries. Cash refined oil was slightly lower with easier crude. Refined salad was quoted at 13⅜c. per pound, tankcars, New York, prompt delivery.

Crude oil was slightly lower. Trading was reported quite active for prompt shipment, chiefly in Texas. Tankcars were quoted at 9⅞c. per pound, f.o.b. Mississippi Valley; 10c. to 10¼c. in the southeast; 9¾c, Lubbock and 9⅞c. to 10c., Waco.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, December 2, follow:

	Sales	High	Low	Close
		Cents per Pound		
Dec.	154	12.11	11.71	11.94S
March	402	12.22	11.96	11.98S
May	422	12.31	12.05	12.10S
July	235	12.42	12.12	12.17S
Sept.	3	12.10	12.06	12.05@12.10
Oct.	3	12.22	12.03	12.03@12.07
Dec. (1961)	9	11.90	11.87	11.90 Bid

Total sales and switches, 1,245 contracts.

Peanut—Price trend continued downward. Market was off 1c. Crude was sold at 12½c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined was lower at 15¾c., tankcars, New York basis. Supplies were liberal. The government offered peanuts to make 50 tankcars of oil.

Soybean—Crude backed and filled with futures last week, closing slightly lower. Tankcars were nominal at 9⅞c. per pound, Decatur, unrestricted for prompt shipment. Refined salad declined to 12.15c. per pound, tankcars, New York basis.

Greece bought 5,000 tons of soybean oil last week for December shipment and was scheduled to buy another 11,000 tons in a few days. Morocco received offers for 16,000 tons and India was in the market for 4,000 tons. Spain was expected to start buying oil against recent authorization of 110,000 tons within the next week or two.

Tung—Steadier tone prevailed in the market. Sellers showed less disposition to shade quotations owing to reduced supplies and higher cost of replacements. Tankcars ranged from 22¼c. to 22½c. per pound, New York, prompt delivery, depending upon seller. Drums ranged from 24¼c. to 24¾c., spot, as to quantity. Domestic oil was unchanged at 22¼c., tankcars, f.o.b. mills, first half December and 22c., second half.

The Commodity Stabilization Service, Dallas office, reported the sale of 420,000 pounds of tung oil at 15.10c. per pound, bulk for export last week.

Cottonseed Crush: October

Cottonseed received and crushed and production of cottonseed products during October and September, as compiled by the Bureau of Census, follows:

Cottonseed

	October	September
	Tons	
Receipts at mills[1]	1,697,900	909,800
Crushed or used	760,300	412,900
Stocks at mills	1,639,000	701,900

Crude Oil

	Pounds	
Produced	258,400,000	133,300,000
Stocks at mills	64,200,000	34,300,000

Cake and Meal

	Tons	
Produced	353,500	189,300
Stocks at mills	167,700	137,100

Hulls

	Tons	
Produced	164,600	90,000
Stocks at mills	57,900	35,700

[1]Net receipts for each state are derived from the quantity of seed crushed and the net changes in stocks.

Miscellaneous

Cocoa Butter—Demand was moderate chiefly for prompt needs. Spot stocks were light and ranged from 64c. to 69c. per pound, according to quantity.

Copra—Shipments were easier and off $5 per ton. Prompt shipment was available at $167.50 per ton, c.i.f. Pacific coast with bids reported at $5 less.

Flaxseed—Crushers raised bids for cash flaxseed 9c. a bushel and strong undertone persisted as offerings dwindled. Most users have supplies for some time ahead but short-covering forced the upturns and indications are that further advances would be necessary to bring out any appreciable increase in offerings. Bids were at $2.84 a bushel, spot and to-arrive, basis Minneapolis. Major portion of arrivals

Oils, Fats and Waxes

applied on previous to-arrive contracts. Only three cars traded in the spot market, while deferred bookings amounted to 53,000 bushels after the advances. Arrivals for all accounts totaled 45 cars, against 75 a year ago.

Fats and Greases

Greases—Reduced buying interest for choice white weakened this grade and quotations were off about ¼c. Prices were nominal at 8¾c. to 9c. per pound, tankcars, delivered, as to seller. Offerings also became freer. Yellow grease was quiet and unchanged at 5c. to 5⅛c., same basis.

Lard—Futures were lower. Cash lard was inactive and nominal at 10.20c. per pound, drums, Chicago.

The Department of Agriculture announced November 25 the purchase of 8,034,000 pounds of lard in cartons, also the suspension of its lard buying program. The agency purchased 23,106,000 pounds of lard at the cost of $3,190,000 since start of program October 27.

Tallow—An easier tone developed because buyers showed less interest in replacements. Offerings also increased. Prices were unchanged and nominal. Bleachable fancy was quoted at 6c. to 6⅛c. per pound, tankcars, delivered; prime, 5⅞c.; special, 5½c. to 5⅝c., guaranteed fancy, 6.30c. and No. 1, 5c. to 5⅛c., same basis. Export interest slackened. Guaranteed fancy was nominal at 6⅝c. per pound, bulk, f.o.b. steamer and 1c. higher for drums, f.a.s.

Soybean Crush: October

Soybeans received and crushed and production of soybean oil and meal during October and September, as compiled by Bureau of Census, follows:

Soybeans

	October	September
	Tons	
Receipts at mills	3,546,700	703,900
Crushed or used	1,066,900	806,200
Stocks at mills	2,974,500	494,700

Crude Oil

	Pounds	
Produced	390,700,000	298,400,000
Stocks at mills	98,000,000	64,100,000

Cake and Meal

	[1] Tons	
Produced	830,100	629,200
Stocks at mills	96,000	82,800

[1] Includes millfeed (hull meal).

Fish Oils

Menhaden—Crude was stronger and higher because of increased demand. Price was raised to 6¼c. per pound, tankcars, f.o.b. works, and fair volume of business took place at the advance. Fishing continued off North Carolina and fair catch was reported during the past two weeks. Refined oils were steady and unchanged. Light pressed was held at 10c. per pound, tankcars, New York basis.

Cake and Meal

Cottonseed Meal—Increased supplies and slow demand weakened the market. Prices were off $1 per ton. Meal 41 percent was offered at $54 per ton, sacked, Mississippi Valley; $56.50, Alabama and $59 to $60, Georgia Carolina area.

Linseed Meal—Stronger undertone developed in this market, but prices were unchanged. Formula feed manufacturers held purchases to nearby requirements and better inquiry for deferred deliveries came from re-sellers. Substantial advances in soybean meal and higher flaxseed costs were bullish factors. Extracted meal, 34 percent protein, was held at $52 a ton for current week, $53 for balance of December, none offered beyond. Old process meal was 50c. higher at $58.50 for November and $59.50, January-March.

Peanut Meal—Market was weaker because of increased offerings and quiet demand. Meal, 45 percent was lower at $55 per ton, sacked, f.o.b. Alabama, Georgia area mills and solvent at $52 per ton.

Soybean Meal—This market scored substantial advances as increased export business caused clean-up of pressing supplies and made current prices seem attractive to trade that had been watching for the low point. Advances of up to $4.50 a ton marked reversal of downtrend that had persisted since early September. Sizable tonnage was sold for export in December. Unrestricted meal was $4.50 higher. Strength in oil and continued heavy production checked further advances. Meal, 44 percent protein was higher at $47.50 a ton, unrestricted, bulk, Decatur, for prompt delivery.

Waxes, Vegetable

Carnauba grades on spot continued in good demand for prompt delivery while interest in future was inactive. Stocks on spot were limited and closely held. Offers from Brazil also were light and firm. No. 3 Ceara on spot ranged from 67c. to 68c. per pound, according to quantity, with Parnahyba held at 2c. higher. Yellows were unchanged and well held. No. 1 Ceara was maintained at 98c. to 99c. per pound, spot and Parnahyba 2c. more.

Scarcity and firmness of crude beeswax continued to feature the market. Offers for shipment continued scanty. This was reflected in refined grades which were strong and tending higher.

Japan wax was in good demand and improved volume of business was indicated at 29c. to 31c. per pound, spot, according to quantity.

CARNAUBA WAX
Refined—Flaked
Specializing in Yellows & Bleached
Candelilla Esparto
Japan Wax Beeswax
WM. DIEHL & CO.
116 East 56th St., N.Y.C. 22, N.Y.
MUrray Hill 8-7960

For Domestic and Export
COTTONSEED MEAL AND CAKE
PEANUT MEAL - SOYABEAN MEAL
Export Codes: ABC 5th, BENTLEY'S JUNIOR PEERLESS
Cable Address: BRODE
Phones: L. D. 271 — Local 38-2544
Teletype No. ME-260
THE BRODE CORPORATION
P. O. Box 700 1012 Falls Building
MEMPHIS, TENNESSEE

PRICE QUALITY SERVICE
SESAME OIL U.S.P.
WELCH HOLME & CLARK CO., INC.
One Hudson St., N. Y. 13, N. Y.
BA 7-4465

WAXES
M. ARGÜESO & CO. INC.
441 Waverly Ave., Mamaroneck, N.Y.
Owens 8-8500 • Cable: MARGUESO • Established 1908
Importers and Refiners
CARNAUBA • OURICURY
CANDELILLA • BEESWAX
Crude • Refined • Bleached • Flaked • Powdered
MAMARONECK REFINED BRAND
Vegetable Waxes
CERESINS — OZOKERITES
Palm Waxes — Resin Blends
Compounds and blends made to your specifications
CERITA WAXES

Manufacturers of
"CORONA" LUXURY BRAND LANOLIN ANHYDROUS USP
"NOVOL" COSMETIC OLEYL ALCOHOL SUPERFINE COSMETIC LANOLIN USP
"HARTOLAN" WOOL WAX ALCOHOLS BP
POLAWAX SELF-EMULSIFYING WAX
"FLUILAN" LIQUID LANOLIN
"PROTANAL" Sodium ALGINATE
"CRODACOL" CETYL, STEARYL OLEYL ALCOHOLS
Croda INC.
15 E. 26 St. • New York 10, N.Y.
Tel. MUrray Hill 3-3089
Cables: CRODAFAS, NEW YORK
Subsidiary: Hummel Lanolin Corp. 185 Foundry St. Newark 5 N. J.
NEW YORK LONDON MILAN

QUAKER STATE
QUALITY WAXES
A COMPLETE LINE FOR ALL INDUSTRIAL USES
QUAKER STATE OIL REFINING CORP.
WAX SPECIALTIES DEPARTMENT
OIL C'TY PENNSYLVANIA

WARWICK WAXES
SHAMROCK CHEMICALS CORPORATION
420 Lexington Ave., N. Y. 17, N. Y. • ORegon 9-2550

OLEIC ACID
STEARIC ACID
HYDROGENATED TALLOW FATTY ACIDS
ACME HARDESTY CO.
60 East 42nd Street
New York City 17, N. Y.
MUrray Hill 2-8556
Factory: Philadelphia, Pa.
DISTILLED VEGETABLE F.A.
DISTILLED TALLOW F.A.
HYDROGENATED TALLOW GLYCERIDES.

DARLING'S Chemical Clues
...stearic and oleic acids from prime stocks!

Darling supplies the fatty acids and glycerides you need when you need them! A 'phone call is all that's necessary to send Stearic and Oleic Acids on their way to you—but fast! Stearic Acid stock products are available in single, double or triple pressed grades. Oleic Acids include Low Titre Distilled, Distilled, Low Titre Special Red Oil, Special Distilled Oleic Acid and Low Linoleic Oleic. All in stock at all times . . . all shipped immediately! Call DC and see!
OLEIC ACIDS • FATTY ACIDS • STEARIC ACIDS • GLYCERIDES • LOW LINOLEIC OLEIC
Dept.-DR-120
DARLING & COMPANY / 4201 S. ASHLAND AVE. / CHICAGO 9, ILL.

YES! they're NOW AVAILABLE!

Safer! Stronger! Cost-Cutting!

Aero RUBBER-CUSHIONED STANDARD CORK-CUSHIONED CARBOY BOXES
5 - 6½ - 13 Gal.

Longer-life, lower breakage, precision-made carboy boxes, built to I. C. C. specifications. Proof against rough handling and long-haul hazards. Cork or rubber-cushioned: The Strongest and Safest Made. Prompt service and deliveries.

BRUM & WILLSE DIVISION
UNITED BOX & LUMBER CO.
45 S.Wheeler Point Road
NEWARK 5, N. J.
MArket 2-4500

Extra GLASS & PLASTIC Bottles All Sizes - From 1 to a Carload
★
Serving entire chemical industry over 35 years

5, 6½ and 13-Gal.
PLASTIC BOTTLES
Encased in "POLY-STANDARD" CARBOY BOXES. Approved ICC-1G. Durable. Light weight.

Inquiries cordially invited

13-Gal. Glass Bottles: Immediate Delivery !

BUY ON TERMS!

STAINLESS PILOT CENTRIFUGE IN STOCK
Bird 12" dia suspended solid basket Stainless Steel Centrifuge with 2 HP 3500 RPM motor directly connected. Vapor tite construction, complete with skimmer and plow.
JUST LIKE NEW
Wire or phone collect—GA 1-1380
ME MACHINERY AND EQUIPMENT CO.
123 Townsend St. • San Francisco 7, Calif.

SPECIALS
Column: 24" x 22', 316 stain. steel.
Disintegrators: Rietz RD18-P and RD-12.
Mills: J. H. Day 16x40" high speed 3-roll.
Dryer: American 24x48" dbl. drum.
Dryer: Bowen lab. spray, st. st.
Evaporator: Buflovak sgl. eff. st.st. 94 sq. ft.
Dryer: Porter 2 x 4' vac. drum, st st.
Centrifugal: Tolhurst 26" rubber, 2-speed.
Filter: Sweetland #5 st. st. lined.
Filter: Eimco, drum 16" x 12".
Centrifugal: Tolhurst 48" st. steel.
Dryer: Procter & Schwartz 6-tray st. st.
Mixers: Ross 150 gal. paste, 10 hp.
Centrifugal: AT&M 60" st. st. perf.
Write us or call Sealey 8-1431
Send us a list of your idle machines.
LOEB EQUIPMENT SUPPLY CO.
814 W. Superior St., Chicago 22, Ill.

LIQUIDATING

Ten Million Dollar Chemical Plant
NORTH JERSEY AREA
Type 316 Stainless Steel Equipment

1—2600 gals. type 316 SS vertical vacuum receiver.
1—Struthers Wells 150 gal. type 316 SS pressure vessel, 500# pressure, ASME Code National Board.
2—Rubber lined horiz. storage tanks, 5500 gals., working pressure 45#.
6—Rubber lined vertical storage tanks, 4500 gals., working pressure 45#.
2—Rubber lined vertical storage tanks, 2500 gals., working pressure 45#.
2—Buflovak type 316 SS jacketed rotary vacuum dryers, 5' x 30', complete with 25 HP explosion proof motors and drives.
3—Type 316 SS Ter-Meer continuous type centrifuges, 4' dia. bowls, complete with motors.
1—Readco stainless steel horiz. blenders, 450 cu. ft. working capacity, complete with 75 HP motors.
3—Mikro Model 3TH stainless steel pulverizers, complete with 40 HP explosion proof motors.
3—Nash SH-6 SS vacuum pumps, complete with 20 HP motors.
2—Aldrich Groff type 316 SS hydraulic triplex pumps, size 2 3/4" x 4" at 500 psi.
2—Powell type 316 SS, 10" hyd. oper. flanged and gate valves.
3—Tyler type 38 tandem SS Hummer screens, size 42" x 9'8".
3—Williams type 316 SS hammermills with 100 HP motors.
2—200 gals. type 316 SS jacketed kettles.
500 tons of type 316 SS pipe, fittings and valves, from 2" to 6".
500 tons of structural steel.
4—Patterson Kelley SS heat exchangers, 235 sq. ft. and 300 sq. ft.

Our 75th Year

R. GELB & SONS, INC.
EST. 1886
UNION, NEW JERSEY MUrdock 6-4900

Trade Name Chemicals

—*Continued from page 57*

to "Kempore" (azodicarbonamide) from National Polychemicals, Inc., and will also manufacture dinitrosopentamethylene tetramine.

The latter is made by E. I. duPont de Nemours & Co. under the "Unicel" tradename and by Imperial Chemical Industries as "Vulcacel."

Arnold Hoffman & Co., a subsidiary of ICI, is producing "Vulcacel B-40" at its Providence, R.I., location and has long-range plans for marketing a broader range of rubber chemicals based on ICI technology.

Currently, the company offers "Nonox" antioxidants and "Nonox ZA," an antiozonant, through Harwick Standard Chemical Company, Akron, Ohio. Eventually, the firm hopes to offer some accelerators also.

"Vulcacel B-40" is 40 percent active with an inorganic filler and stabilizer. Price is 68c. a pound in truckload lots, while listing for 80 percent material is $1.44 in truckloads.

Observers report a recent and interesting development in the field: production of expanded plastics systems in which a blowing agent serves as both blowing and vulcanizing agent.

US Patent 2,873,259 for this process is held by Armstrong Cork Company and discloses use of a known blowing agent—p,p'-oxybis-(benzene sulfonyl hydrazide), Naugatuck Chemical's "Celogen"—in the formation of "a novel cellular composition."

Armstrong Cork reports that although the blowing agent and its degradation products appear to function as curing agents, the thrust of the patent is at the cellular composition and not at the blowing agent.

New Products

• **Harshaw Chemical Company** has expanded a new series of aluminum and zirconium alkoxy compounds to include aluminum chelates "PEA-1," "PEA-2" and "BEA-1." Also added to Harshaw's product line: aluminum tri-tridecylate, aluminum N-butoxide, aluminum sec-butoxide (distilled) and zirconium N-butoxide.

The new products are recommended for applications in curing of epoxy and phenolic resins, as catalysts and as hydrophobing agents in textile manufacture.

• **Jefferson Chemical Company,** Houston, Tex., announces price reductions in the company's line of "Surfonic N" nonionic surface active agents.

Tankcar prices on these products, in the eastern zone, are reduced 2½c. a pound. New eastern zone prices will be 20c. a pound in tanks, 23½c. a pound in carload of drums and 25½c. a pound in less than carload drum quantities. In the western zone, prices are 1c. a pound higher across the board. All prices are f.o.b. shipping point with minimum freight allowed to destination.

The "Surfonic N" series of surfactants are nonylphenol ethylene oxide adducts used in household detergents, emulsifiers and wetting agents.

According to D. L. Griswold, vice-president in charge of marketing, the new prices reflect the current market situation for this line of products.

• **Upjohn Company** has a new appetite suppressant, "Didrex," undergoing clinical trials. The product, known generically as benzphetamine, is said to allow the average overweight person to lose more than a pound a week without diet curbs.

• Two new fatty hydroxamic acids are available commercially from **Woburn Chemical Corporation,** Harrison, N.J., for use as chemical intermediates.

The company points out that the compounds have reactive OH and NH groups as well as a long chain fatty group. The products react with alkalis, metallic ions and acylating agents and on heating form isocyanates which can be reacted further with alcohols and amines to form urethanes and ureas respectively.

Suggested end-uses are in surfactants, pigment dispersants, antioxidants and chelating agents.

Tinsley Heads SACCI Slate

—*Continued from page 7*

treasurer, and Arthur C. Curran, Meer Corporation, as secretary.

The following were nominated as directors: Richard C. Schleck, Nitines, Inc.; John A. Flobeck, Diamond Alkali Company; James E. Shand, Allied Chemical Corporation; James S. Auchincloss, OIL, PAINT & DRUG REPORTER; George M. O'Brien, U. S. Industrial Chemicals Company, a division of National Distillers & Chemical Corporation, and V. Eric Johnson, Chas. Pfizer & Co.

IN NEW POST: Peter C. Hereld, appointed to the just-created position of director of development for Sun Chemical Corporation, New York.

Dixie Chemical to Have New Extraction Facility

Dixie Chemical Company is under way on construction of the third and largest of a series of units planned for its Hirsch Road plant in Houston, Tex.

The facility now being built will separate pure chemicals out of mixtures, such as byproduct streams and waste materials from paint, organic chemical and petrochemical plants in the area.

At one of the two completed units, Dixie reports, two vacuum flash stills were recently added for recovery of contaminated solvents.

Besides its Houston plant, Dixie has a storage warehouse at Corpus Christi, Tex., and maintains stocks of some chemicals in distributor outlets at various points in the southwest. The firm's sales are expected to exceed $1.5 million this year, its fifteenth year in business.

Carbide Chemicals Promotes

Union Carbide Chemicals Company has appointed E. E. Husted as manager of fluorocarbons marketing. Since 1958, Mr. Husted had been sales manager for the Union Carbide Corporation division's line of "Ucon" propellants. He is succeeded in that post by Thomas M. Hartley, who has been sales manager for refrigerants during the past two years.

2—OLIVER PRESS PRECOAT FILTERS 5'3" x 3'—Type 316 S. S.
4—24" FILTER PRESSES—S.S. Fittings, Wood Frames.
1—VULCANIZER—5' x 9' 120 lbs. Pressure.

Machinecraft Corporation
800 Wilson Avenue, Newark 5, New Jersey
Mitchell 2-7634

CHOICE EQUIPMENT

2—Bubble Cap Columns 30" Stainless Steel.
1—Hercules 16" x 16" Stainless Steel Filter w/24 plates & frames.
4—Hercules 8" x 8" Stainless Steel Filter w/12 plates & frames.
5—Shriver #1 and "00" Diaphragm Pumps.
1—Stainless Steel 30 gal. Autoclave 1000 psi w/Jacket & Agitator w/XP Motor.
1—Cyclotherm Package Boiler 250 psi, 600# hr.—20 HP.
4—Stainless Vacuum Receivers 50 to 300 gals.
1—Horiz. Closed Spiral Mixer, 3' x 12', Jack.
3—Spiral Blenders, 800 to 2000#.
1—Patterson 5' x 6' Jack. Ball Mill, 25 HP.
1—Day 50 gal. S.S. Sigma Blade Mixer.
1—N.J. MX Pony Labeler.
1—Raymond 30" Whizzer Separator.
5—Rotex Screens 20" x 38" to 60" x 84".
3—S.S. Cent. Pumps, 2 x 1½ & 1½ x 1.
2—Kent High Speed 3 Roll Mills 14" x 36".
1—Patterson 250 Gal. S.S. Kettle, Jack. w/Ag.
2—Worthite S.S. Pumps 8 x 6 & 3 x 2.
2—Combs Type V Gyrators—20"—XP Motors.

Write for Bulletin A-45 for Complete Listings
We Buy Single Items to Complete Plants
Send Us Your Lists

THE MACHINERY & EQUIPMENT CO.
91-93 New Jersey R.R. Ave., Newark 5, N. J.
Market 3-3103

NEW 4000 Gal. STAINLESS TANK
DAY HY-R SPEED MILL
BUFFALO 32" x 90"
DOUBLE DRUM DRYER

CENTRIFUGALS—12" 30" 40" & 48".
CENTRIFUGES—Sharples #5 & 6 S.S.
DRYERS—Hersey 5' x 26' Rotary Stainless
Buffalo 32" x 90" Double Drum Dryer
Buffalo Vac. Drum Dryer 24" x 26".
Despatch Ovens Elec. Heated.
3—Devine & Stokes Vac. Shelf Dryers.
FILLERS—Powder & Liquid. Also Labelers.
FILTERS—#2 Sweetland 12 Stainless covered leaves.
Ertel 6" & 10" Disc type.
FILTER PRESSES—6" to 36" Iron & Wood.
KETTLES—Stainless Jack. 20 to 500 gals.
Dopp 350 gal. Cast Iron Jack. Vacuum.
Devine Impreg. Units 30" & 36" dia.
Steel Alum & Copper 5 to 2,000 gals.
MILLS—Raymond #00 Pulverizer 30 HP complete. Also #0000.
Mikro Pulverizer #4, 2S1, 2TH, ISH.
Hammer Mills & Pulverizers 3 to 50 HP.
Williams #3 & #2XX Hammer Mills.
Taylor-Stiles 7½ HP Cutter.
Rotary Cutters 1 HP & up.
Sprt.-Wald. Stainless Spike Crusher.
Pebble, Jar & Ball Mills. Lab to 6' x 8'.
3 Roll, 9" x 24", 12" x 30", 16" x 40".
Lehmann 4 Roll W. C. 12" x 36" Steel
MIXERS—Baker Perkins 100 gal. Jack.
B. P. 15 HP—Masticator Mixer.
Day Imperial 75 & 150 gal.
Change Can Mixers 8, 15, 40, 80 gal.
Day Jumbo 700 gal. horiz. Mixer.
Sprout-Waldron 10,000# horiz. Spiral Mixer.
Blystone 3000# horiz. spiral Mixer.
Day 1000# horiz. Dry ribbon Mixer.
Dry Spiral Mixers 50 to 10,000#.
Lancaster 6' dia. 25 HP & #1, 3 HP.
PUMPS—Vacuum 10 to 500 CFM.
Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Day, Robinson Rotex type.
SOAP MACHINERY—Toilet, Laundry, etc.
TABLET MACHINES—Colton 4½ T.
Stokes R single punch & DR3 rotary.
TANKS—Stainless, GL., Lined, Steel.
MISC. Boilers Gas & Oil. Conveyors.

Partial Listings — Write for Bulletins

STEIN EQUIP'T. CO.
107 8th St., Brooklyn 15, New York
STerling 8-1944

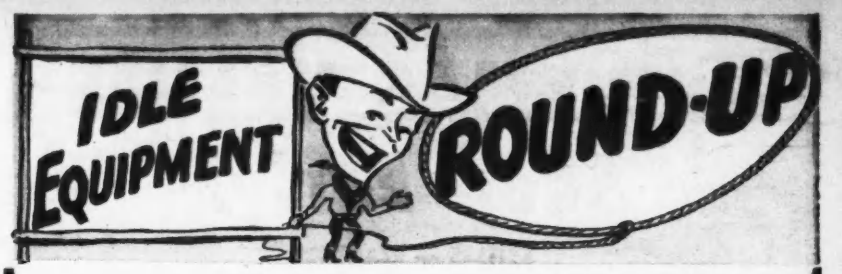
CHEMICAL PLANT SALE
Everett, Mass.

B&P Ter Meer 530 Centrifuge 316 S.S.
Sharples C-27 Centrifuge 316 S.S.
Eimco 4'x2' Rotary Dewaterer 316 S.S.
S.S. Centrifix Eliminator 42"x12'6".
Swenson 24"x20' jkt. S.S. Crystallizers.
Swenson Evaporator 425 sq. ft. Stainless.
Bubblecap Columns 7'x25'—8 trays; 5'x88'—35 trays; 3'x38'—35 trays.
Baker Perkins 18DIM 300 gal. Mixer.
100 Steel Tanks 1000 to 350,000 gal.
Penna. SX13 Hammermills, 400 HP.
Heil Patterson Crushers, 100 HP.
Koppers 36"x42"—2 Roll Crushers.
Centrif. Blowers 23M; 29M; 50M, CFM.
10,000 ft. Trough Conveyor 30"; 36"; 42".
Stainless Centrif. Pumps 2"x2" to 6"x5".
Patterson Uni-Power Drives 1 to 20 HP.

Stainless Type 316 Tanks

17,500 gal. 15'x16'OA Flat top, cone bot.
11,500 gal. 12'x15'OA cone bot. 15 HP Agit.
10,500 gal. 10'x23'OA dish top, cone bot.
400 to 850 gal. (10), Some Agitated.

HEAT & POWER CO., INC.
60 E. 42nd St., N. Y. 17 MU 7-5280
SALES AGENTS for
HARCON LIPSETT JOINT VENTURE



DISPOSE OF YOUR IDLE MACHINERY BEFORE INVENTORY FOR CASH OR NEEDED EQUIPMENT

REACTORS — PRESSURE VESSELS

2 Stainless 400 gal. Reactors Jktd. Agtd. by Patterson and Struthers Wells.
Stainless Reactor, 2000 gal. Fully Jktd. Agitated.
Nickel Clad Reactor, 7'x11'6".
2 MONEL Reactors; 2800 gal. 6'8"x13'; ASME Jktd. & Intern.
3 Stainless Vert. Pressure Tanks; 42"x10'; closed dished heads.
6 Heavy Duty Stainless Tanks; 850 gal. with S/S Agitators.
Pfaudler Gl. Lined Reactors; all sizes from 50 to 1000 gal.
Majonnier Stainless Vac. Pans; 3'x10' and 6'x12'; others.

MIXERS ALL TYPES

Baker-Perkins Jktd. 5 gal. UNE-7, Dbl. Arm Mixer with pressure cover; 30 HP.
Readco Jktd. 15 gal. Dbl. Arm Sigma Blade Mixer.
Stainless Steel 150 gal. Jktd. Dbl. Arm Mixer with Vac. Cover; Hydr. Tilt;
Other Baker Perkins Jktd. Mixers, 200 and 300 gal.
J. H. Day Cincinnatus Dbl. Arm Mixer; 300 gal. STAINLESS Jacketed.
Patterson Kelley Twin Shell Blender; Stainless; 150 cu. ft. 60" Dia. 10 HP.
Patterson Conaform Stainless Vacuum Blender; Jacketed; 13.7 cu. ft.

NOW IN STOCK for IMMEDIATE DELIVERY. ALL SIZES FALCON Ribbon Blenders in Steel or Stainless.

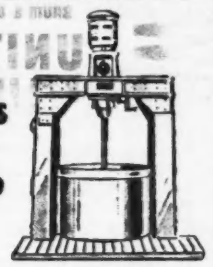
FILTERS — FILTER PRESSES

4 Pressure Filters 30"x56" Type 316 Stainless; 100 sq. ft.
Sparkler S/S Filter Model 14 S 4.
Sparkler Steel Filter Model 33 S 17.

OLIVER PRECOAT FILTERS

3"x2" Monel. 5'3"x8' Stainless.
(2) 5'3"x3" Steel or Rubber.
Feine S/S Rot. Vac. Filter 3'x1'.
Oliver Cont. Rot. Vacuum Filter.
Panel Type; 8'x8' and 8'x10'.
S/S Nutsche Type Filter; 6'x2'.
Bowser Filter with Pump; 2000 GPH.
Shriver and Sperry Plate & Frame Filter Presses up to 42" in Cast Iron, Stainless, Ni-Resist, Rubber Covered or Wood; all types.

SAVE $5000, on FIRSTS WEEKLY FEATURED SPECIAL



Tolhurst Suspended Centrifuges 40" x 20" with Rubber Covered Perforated Baskets and Curbs; Monel Plow Discharge and 2 Speed 7½ HP Motors . . .

CENTRIFUGES

Stainless Centrifugals from 30" to 60"; A.T.&M. Tolhurst, Fletcher, etc.
2 Sharples Stainless Steel Model PN14 Super-D-Canters.
4311 S 1 Sharples C 27 Super-D-Hydrator in Type 316 Stainless with 40 HP Motor.
5147 S 13-14 Two Bird Continuous Screen Type Horizontal Centrifuges; Monel & S.S.; 24" x 24".
2 Bird Rubber Covered, 48" with Plows; Fume Tight; 40 HP.

EVAPORATORS — DRYERS

Buflovak S/Steel Thermo-Recompression Evaporator; Sanitary with all accessories.
Buflovak S/Steel Dbl. Effect Evaporator Model 8½-60 D.
Stokes Rot. Jacketed; 34"x10'.
Pittsburg Lectro Dryers, Bac 25 and BWC 3400.
Devine Vac. Chamber Dryers, Double Door Model No. 36.
Stainless Lab. Drum Dryer, 8"x11½"
Bowen S/S Lab. Spray Dryer.
Louisville S/S Rotary Dryer, 30" x 28'; Indirect fired.
Louisville MONEL Rotary Steam Tube; 54" x 35".
Pfaudler 300 Gal. Stainless Evaporating Dish; Jktd. 6' x 30".
Link Belt Rota Louvre Dryer; 502-20.

MILLS—PULVERIZERS

2 Stainless Micronizers 30".
Ball Mills and Pebble Mills by Abbe, Patterson, International some Jacketed; up to 8'x8'.
Mikro Pulverizers up to No. 4's.
Fitzpatrick Comminutaters; Models D, K and C; motorized.
American Ring Roll Crusher; 50 HP.
Mikro S/S Atomizers; Nos. 6 and 5.
Raymond Imp Mills; many sizes.
Williams Hammer Mills to 60 HP.

JUST ADDED TO STOCK

Pfaudler Glass Lined Reactors; Unused; 20" x 24"; 30 PSI internal; 90 PSI Jacket.
Stokes Model 138 D Vacuum Shelf Dryer with accessories.
Abbe and Ball & Jewell Rotary Cutters Size "O", 1 and 2 with Motors.
Dorr Oliver 550 Gal. Stainless Thickener or Clarifier, 5' x 5' with Bolted Head, Agitated.

SPOTLIGHT SPECIALS

Stainless Steel Kettles; 500 Gal., 800 Gal. and 1300 Gal. others.
Stainless Lined 1000 Gal. Reactor. 60" x 68"; Jacketed, Agtd. Plus Condensor.
Stokes Double Chamber Impregnators.
Komarek Greaves Briquetting Presses; 75 HP.

FIRST MACHINERY CORP.
209-289 TENTH STREET, BROOKLYN 15, N. Y.

FMC Pays MORE For Your Surplus

PARKING ON THE PREMISES
Phone: STerling 8-4672
Cable Address: "EFFEMCY"

FMC

MACHINERY ANYONE?

2—Steiner Ives Electric Ovens, 36 KW, drying chamber 5'x6'x6' high. Each with temp. control, blower & motor.
1—Oliver 74"x51" Rotary Vac. Filter, with agitated tank, motors, etc. All Stainless Steel contact parts.
1—Stokes Model 294 single punch Tablet Press with 7½ h.p. vari-drive.
2—Stokes "DDS2" Rotary Tablet Machines, each with 5 h.p. vari-drive.
1—American 36"x42"x84" lg. double door steam jacketed Sterilizer.

WHAT DO YOU HAVE FOR SALE?

BILL WOLF, Inc.
2708 CAROL ROAD UNION, N.J.
MUrdock 4-8883

EQUIPONOMICS

BIRD Continuous Centrifuges 18" x 28" 316 S.S. (1952) 15 H.P. Washing

OLIVER VACUUM FILTER—S.S. 316, 3'x6'
COLUMN S.S. 4' D x 65' high, 55 plates.
TANKS S.S. 304, 2500 gal. 7' x 8' new.
MIKROPULVERIZER—2TH—7½ H.P.
KNEADER MASTER — Paterson 2½ gal. vac., jack., variable speed (Inf.)
HEAT EXCHANGERS S.S., 60 to 2300 sq. ft.
CENTRIFUGE—Tolhurst 40" rubber lined, centerslung, 5 H.P.
SPARKLER FILTER—Steel, Model 33-17.

PROCESS PLANTS SERVICE, INC.
287 Central Ave., Clark, N.J. Tel. FUlton 1-1183-4

FOR THE BEST IN USED EQUIPMENT

Conical Dry Mixer 192 cu. ft. vol.; 125 cu. ft. opr. vol., with 15 H.P. Unibrake Motor.
4—Werner & Pfleiderer 200 gal. jktd., sigma blade Shredders.
1—Ball & Jewell #2 Cutter.
4—Link-Belt Vibrating Screens 4' x 8'.
1—Jeffrey Vibrating Conveyor.
1—30" Sperry Filter closed del., 3-eye, 39-plates, 40-frames.
1—42" Sperry Filter 40-plates, 41-frames, hyd. closing, open del.
1—International Ball Mill, porcelain lined, 48" x 60", 15 H.P. Unibrake Motor, 2-drums balls. Like new.
1—Schutz-O'Neill Pulverizer 22", Style D.
1—Abbe Pebble Mill 5' x 22'.
1—Sparkler Filter 33-S-28, with Scavenger Plate, steam jacketed.
1—2 qt. Sigma Blade S.S. Mixer.
1—250 gal. Kettle, nickel jacket, 100#.
1—Bartlett Hog Mill with 7½ H.P. motor.
1—430 S.S. Tank 3000 gal. vert. ¼ plate, with 2 pc. cover.
2—Vacuum Pumps, Gardner-Denver, 5" bore 4" stroke, with 7-½ H.P. motors.
1—#316 S.S. Reactor 265 gal. jkt.
2—Twin Screw Mixers 120 gal. jkt.
2—Aetna Water Stills 20 gph, new.

Large stock of new and used H.P. Boilers, Tanks, Pumps, Heat Exchangers, Freon Compressors, Stainless Steel & Brass Valves. Advise us as to your requirements.

H. LOEB & SON 4643 LANCASTER AVE., PHILADELPHIA 31, PA.

"OUTSTANDING VALUES"

3—Lawrence type 316 Stain. Vert. 3" submerged Pumps. 250 GPM A100'.
2—Sutorbilt 14" x 10" Posit. Blowers. 125 HP 900 RPM. 2400 CFM @10#.
2—Elliot type O Blowers. 6000 CFM @5.5# pressure. 200 HP.
2—Sharples PN-15-Super-D-Cantors 316 stainless contact. 10 HP Mtr.
5—New Jeffrey 6" and 6½" Stain. Tub. Vibr. Conveyors. 12 & 15' long.
2—Raymond #1 auto Pulverizers. Comp/5/6" Whizzer Separator.
1—New Blaw-Knox Comp. Rotecel Extraction unit. 350 T D.
1—Bird 40" x 60" SS horiz. Cont. Centrifuge. 50 HP Motor.

For immediate quote, wire or phone collect—GA 1-1380

ME MACHINERY AND EQUIPMENT COMPANY
123 Townsend St. San Francisco 7, California

PRE-XMAS VALUES
Shop Early!

KETTLES — REACTORS

1—1900 GAL. T316 SS JKT. REACTOR, 5 HP AGIT., VACUUM.
5—1350 GAL. T347 SS JKT. KETTLES, ANCHOR AGIT.
1—1000 gal. Dopp cast iron kettle, jkt., 25 HP agit.
1—750 gal. T304 SS jkt. fermenter, ASME, 10 HP agit.
1—600 gal. T304 SS jkt. crystallizing kettle, agit.
2—500 gal. Pfaudler glass-lined jkt. reactors, agit.
6—465 gal. T304L SS jkt. reactors, 175# WP.
2—125 gal. T316 SS jkt. fermenters.
2—100 GAL. T304 SS JKT. REACTORS, ASME, VAC., UNUSED.

STAINLESS STEEL TANKS

1—5700 gal. horiz. T304 SS, 6'4" x 24', UNUSED.
2—4500 gal. vert., T304 SS, 8' x 12', UNUSED.
1—4300 GAL. HORIZ. T304 SS, 6' x 20', DISHED HEADS, 50# WP.
1—3700 gal. vert., T304 SS, 6' x 17', VACUUM.
1—3300 gal. vert., T304 SS, 6' x 14', dished heads.
1—3000 gal. vert., T304 SS, 6' x 15', coils, Vac.
3—2750 GAL. VERT., T304 SS, 7' x 8', DISHED HEADS, COILS.
1—2500 gal. vert., T316 SS, 7' x 7', dished heads, agit.
2—2300 gal. vert., T316 SS, 7' x 8', coils, agit.
4—2250 GAL. VERT., T316 SS, 7' x 6'3", DISHED HEADS.
1—2100 gal. vert., T316 SS, 6' x 9'10", cone bottom.
12—1750 gal. vert., T304 SS hoppers, 235 cu. ft.
1—1600 gal horiz., T304 SS, 5' x 11', dished heads.
1—1250 gal. vert., T304 SS, 5' x 12', coils, vac.
2—1000 GAL. VERT., T304 SS, 5'5" x 6'2", UNUSED.
1—600 gal. vert., T304 SS, 5' x 4', dished heads.
6—685 gal. vert., T316 SS, 3' x 13', coils.

SELECTED RECENT PURCHASES

1—60" DIA. X 35 PLATE T316 SS BUBBLE-CAP COLUMN.
2—DAVENPORT 8' X 60' ROTARY DRYERS, 7/16" WELDED, COMPLETE.
1—BUFLOVAK 6" X 8" LABORATORY DBL. DRUM DRYER—VACUUM.
1—LOUISVILLE 4'6" X 25' ROT. STEAM-TUBE DRYER.
2—MIKRO #3TH PULVERIZERS, STIRRUP HAMMERS.
1—J. H. DAY #8 CINC., 150 GAL. SIGMA MIXER.
1—AMERICAN 42" X 120" DBL. DRUM DRYER, STAINLESS TRIM.
2—BUFLOVAK VACUUM SHELF DRYERS: 110, 98 SQ. FT.
3—KOMAREK-GREAVES 160,000 PSI BRIQUETTE PRESSES.
1—BOWEN LAB. SPRAY DRYER, T304 SS, CONE BOTTOM, GAS.

EVAPORATORS

1—MOJONNIER 2085 SQ. FT. TRIPLE EFFECT, T304 SS, WITH PREHEATERS.
1—BUFLOVAK 1025 SQ. FT. DBL. EFFECT, T304 SS, SIZE #8-50-D.
1—Buflovak 840 sq. ft. dbl. effect, T304 SS, size #7.5-42-D.
1—Buflovak 710 sq. ft., dbl. effect, T304 SS, size #7-35-D.
1—Buflovak 700 sq. ft. single effect, T304 SS, forced circ.
1—STRUTHERS-WELLS 630 SQ. FT. SINGLE EFFECT, T316 SS, CALANDRIA TYPE.
1—Buflovak 588 sq. ft. dbl. effect, T304 SS, size #6.5-29-D.
1—F. J. Stokes 118 sq. ft. single effect, T316 SS, U-tube still.
2—Rogers 6' dia. vacuum pans, T304 SS, int. coils.

HEAT EXCHANGERS — CONDENSERS

1—1960 SQ. FT. T316 SS, HORIZ. EXCHANGER, ASME 75# WP.
1—1450 sq. ft. T316 SS vert. condenser, remov. bundle.
3—800 SQ. FT. T316 SS VERT. CONDENSERS, ⅝" OD TUBES.
1—800 sq. ft. T316 SS vert. condenser, 1" OD tubes.
1—730 sq. ft. T316 SS horiz. exchanger, remov. bundle.
1—510 SQ. FT. T316 VERT. COND., REMOV. BUNDLE.
4—T316 SS exchangers-condensers: 427, 425, 410, 400 sq. ft.
10—T316 SS exchangers: 290, 277, 264, 250, 200, 185, 165, 150, 145, 105 sq. ft.
8—T316 SS exchangers, 83, 73, 54, 52, 50, 47, 30 sq. ft.
10—Enzinger 185 sq. ft. T304 SS contin.-flow exchangers.

LIQUIDATING ALCOHOL PLANT
OMAHA, NEBRASKA
MAJOR ITEMS

5—BUFLOVAK 42" x 120" DOUBLE DRUM DRYERS, ASME 160# WP.
2—BONNET 7' x 60' ROTARY HOT-AIR DRYERS, ⅜" SHELL, COMPLETE.
1—BONNET 6' x 52' ROTARY HOT-AIR DRYER, 5/16" SHELL, COMPLETE.
2—SWEETLAND #12, (24) 36" DIA. LEAVES, 336 SQ. FT.
6—SHRIVER 48" CAST IRON P. & F. FILTER PRESSES, 50 CHAMBERS.
7—DAVENPORT DEWATERING PRESSES: #1A, 2A.
2—FRENCH OIL TYPE 2-S SCREW TYPE EXTRACTION PRESSES, 60 HP.
2—QUADRUPLE EFFECT EVAPORATORS, CALANDRIA TYPE, 4050 SQ. FT., CAST IRON BODIES & COPPER TUBES. WITH 1230 SQ. FT. HORIZ. COPPER PREHEATERS & 2450 SQ. FT. PANS. TOTAL 19,900 SQ. FT.
6—ANSONIA 691 SQ. FT. HORIZ. DBL. PIPE COOLERS, COPPER TUBES.
3—AMERICAN 654 SQ. FT. SPIRAL STEEL HEAT EXCHANGERS.
18—TUBULAR HEAT EXCHANGERS, COPPER TUBES, 1500, 1350, 1130, 637, 380, 290, 184, 176, 156 SQ. FT.
1—ACME 96" DIA. X 44' HIGH COPPER BEER STILL COLUMN, (20) PERFORATED & (4) BUBBLE CAP TRAYS.
5—LEADER 96" DIA. STEEL RECTIFYING COLUMNS, 44' X 51' HIGH.
2—9500 GAL. HORIZ. STEEL COOKERS, ½" SHELL & DISHED HEADS.

SEND FOR DETAILED CIRCULAR #960-A

PERRY EQUIPMENT CORP.
1407 N. SIXTH ST., PHILA. 22, PA.
Phone: POplar 3-3505

BRILL FOR VALUES

CENTRIFUGES

2—Sharples C-20 and C-27 Super-D-Hydrator, 316 S.S.
1—Bird 18"x28", Solid Bowl, Continuous, 304 S.S.
1—Bird 32" x 50", Solid Bowl, Continuous, 316 S.S.
1—Bird 36" x 50" solid bowl continuous, 347 SS.
3—Sharples PY14, PN14 Super-D-Canters 316 S.S.
1—Tolhurst 26" susp. Rubber Imperforate Basket.
2—Fletcher 48" Suspended 316 S.S. Perforated Basket.
2—Sharples #16, 304 S.S., 3 HP motor.

REACTORS — EVAPS — CONDS — TANKS

1—Glascote 500 gal. glass lined jacketed agitated Reactor.
1—150 gal. 304 S.S. jacketed agitated Reactor.
3—Pfaudler 200 gal. glass lined jacketed Kettles.
1—650 gal. 304 S.S. Reactor with 100 sq. ft. Bayonet Heater.
1—Pfaudler 12" wiped film Evaporator.
1—700 sq. ft. Buflovak 304 SS forced circulation Evaporator.
1—550 sq. ft. Buflovak monel single effect Evaporator.
1—7500 gal. 316 S.S. Vert. Storage Tank, 7'x25', 50 psi.
1—500 gal. S.S. Mixing Tank with nickel coils.
1—2,000 gal. horizontal 304 S.S. tank 5' x 12'.
4—1,000 gal. 304 SS Tanks 5'6" x 6'.
1—2,500 gal. vertical 304 SS Tank, 8' x 7'.
6—7500, 6000 and 2000 gal. Rubber Lined Tanks.
1—12,000 gal. horiz. steel Pressure Tank, 7'6"x36', 200 psi.
6—Stainless Heat Exchangers; 1220, 786, 536, 370, 315, 250 sq. ft.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.

FILTERS

1—#5 Sweetland Filter 304 S.S. 120 sq. ft.
1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Oliver 5' x 6' Steel Rotary Vacuum Precoat Filter.
1—U.S. 200 sq. ft. 304 S.S. Auto-Jet Filter.
1—Hercules 400 sq. ft. 304 SS pressure Filter.
1—Oliver 5'3"x8' Steel Rotary Vacuum, vaportite housing.
1—Feinc 5'x6' Stainless Steel Rotary Vacuum Filter.
2—#10 Sweetland Filters, 27 leaves, 4" centers, 250 sq. ft.
4—36" x 36" alum. P & F, 65 Chambers, 1-1/2 cake, hyd. clos.

DRYERS

1—Buflovak Vacuum Shelf with 20—60"x80" shelves.
1—Devine Vacuum Shelf with 10—40"x43" shelves.
2—Buflovak 42"x120", atmospheric double drum Dryers, complete.
1—Buflovak 32" x 90" Atmos. Twin Drum Dryer.
2—Devine 4'x9', single drum, atmospheric.
1—Buflovak 3'x10' Rotary Vacuum Dryer.
1—Baker Perkins 5'6"x6' Rotary Vacuum Dryer.
2—Buflovak 5' x 30', 3' x 7'6" Rotary Vacuum Dryers 316 S.S.
2—Louisville Rotary Steam Tube 5'x25', 6'x35' 6'x50'.
2—Louisville 8'x50' Stainless Steel lined Rotary Dryers.
9—Rotary Dryers 34"x30', 4'x40', 6'x50', 6'x60', 7'x80', 8'x87'.
1—Traylor 30"x18' Stainless Steel Rotary Dryer.
2—Link Belt, 7'5"x25', 6'4"x24", S.S. Louvre Dryers.
2—Atmos. Tray Dryers, 16 shelves, 40"x24".
1—P&S 10' wide Apron Conveyor Dryer 48' long.

MIXERS

1—Farrel-Birmingham "Midget" Banbury Mixer.
2—Day Imperial 150 gal. jktd. double arm.
1—Baker Perkins 100 gal., jacketed, double arm, 30 HP.
1—Baker Perkins 50 gal. jacketed, double arm.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
2—Steel jacketed Powder Mixers, 225 and 350 cu. ft.
1—Patterson 6' dia. Conical Blender 15 HP.
1—3' dia. Simpson Intensive Mixer.
1—Patterson Kelly 150 cu. ft. Twin Shell Blender.

MISCELLANEOUS

1—Farrel Birmingham, 8" x 16", 2 Roll Chrome Plated Mill.
2—Hardinge 5' x 22" steel lined conical Ball Mills.
4—Mikro Pulverizers, #4TH, 1SH, 1SI and Bantam.
3—Abbe 2½' x 3' porcelain lined Pebble Mill XP motor.
1—Raymond 10" vert Mill, 10 HP.
1—No. 1 Ball & Jewell Rotary Cutter.
1—#18 Cumberland Rotary Cutter.
3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
2—#842 Rotex Sifters 60" x 84" double deck.
1—#24 Rotex Sifter, 20" x 64", Quadruple deck.
5—Day Roball Sifters 40" x 120", 40" x 84", double deck.
1—#81 Day Roball Sifter 40" x 120" single deck.
3—Nash H6 Vacuum Pumps.
25—Chlorimet, Durimet and Duriron Centrifugal Pumps 1½" to 6".
4—Stokes Rotary Tablet Machines DD2, DDS2, DS3, RB2.

Partial List of Values — Send for Complete Circular
TEXAS OFFICE: 4101 San Jacinto Street, Houston 4, Texas — Tel.: JAckson 6-1351

BRILL EQUIPMENT COMPANY
35-61 JABEZ ST., NEWARK 5, N.J. Tel.: MArket 3-7420

EQUIPMENT
for CHEMICAL AND ALLIED INDUSTRIES

1—Mikro #1SH SS pulverizer complete with motor.

2—Struthers Wells type 316 SS 2000 gal. jacketed reactors complete with agitators and drives.

1—Pfaudler 750 gal. glass lined jacketed reactor complete with agitator and drive.

1—Pfaudler glass lined 200 gal. jacketed reactor complete with impeller type agitator and drive.

5—Pfaudler glass lined jacketed reactors 30 to 100 gal. complete with agitators and drives.

2—Pfaudler glass lined vacuum receivers, 20 and 30 gal.

1—Patterson 40 gal. SS reactor, 50# internal, 50# jacket.

1—Hersey SS rotary dryer, 3' x 21'.

2—Stokes single door vacuum shelf dryer with 6 shelves, 24" x 36".

1—Buflovak SS jacketed rotary vacuum dryer, 3' x 15'.

1—Patterson SS 10 gal. jacketed autoclave complete with agitator and drive, 600 psi internal, 175 psi jacket.

1—American 42" x 120" double drum dryer with drive and motor, complete.

1—Buflovak 24" x 36" double drum dryer, complete.

1—Proctor & Schwartz SS apron dryer, 2' x 20'.

10—Robinson SS double ribbon horizontal blenders, 125 cu. ft.

5—Robinson SS double ribbon horizontal blenders, 255 cu. ft.

1—Cleveland SS double cone blender, complete with drive and motor, 85 cu. ft.

1—Gemco double cone conical blender, 40 cu. ft.

2—Sturtevant SS #7 dustite rotary batch blenders, NEW.

1—Baker Perkins Size 16 UUEM jacketed mixer, double arm dispersion type, complete with compression cover and 100 HP motor, 150 gal. capacity.

1—Baker Perkins Size 15, 100 gal. SS jacketed double arm sigma blade mixer.

1—Oat SS jacketed autoclave, 10 gal., 150 psi internal, 150# jacket, complete with Dowtherm unit.

2—Louisville SS rotary dryers, 8' x 50'.

1—Allis Chalmers SS rotary dryer, 6' x 50'.

1—Stokes steel jacketed rotary vacuum dryer, 5' x 30'.

1—Williams "Comet" 4 roll mill, complete.

7—Western States 40" type 316 SS suspended type centrifuges, complete with perforated baskets, plows and 40 HP motors.

4—Tolhurst 40" center slung rubber covered centrifuges, with perforate baskets and motors.

4—Tolhurst 30" center slung rubber covered centrifuges, with perforate baskets.

20—Davis Engineering SS heat exchangers, 102, 119, 136 and 166 sq. ft. New.

1—Stainless steel bubble cap column, 4' dia. x 25' plates.

1—Stainless steel open top kettle, 2500 gals.

1—Patterson Kelley steel twin shell blender, 150 cu. ft., complete with drive and motor.

R. GELB & SONS, INC.
UNION, NEW JERSEY Est. 1886 MUrdock 6-4900

PROCESS EQUIPMENT DIVISION

A. O. Smith 3'x78' Inconel lined Column, 40—1½" Inconel plates, 750 PSI.
750 gal. 316 Stainless Steel Still.
300 gal. 316 Stainless Steel Still.
68, 350, 800, 1000 and 2300 sq. ft. Stainless Steel Heat Exchanger.
Brown 16 section Fintube Exchanger.
Union 2¼"x4" S.S. Pumps 2000 PSI.
Tolhurst 40" S.S. Centrifuge.
#5057 Raymond 5 Roll High Side Mill.
Briquetting Presses 27"x33" & 30"x24".
S.S. Tray Columns, 2', 3', 4', 5' Diam.
Buflovac SS 2 effect Evap. 668 sq. ft.
5'3"x3' S.S. Precoat Filters.
8'x11' Traylor Ball Mill.
Rotary Kilns 8x115', 7x125', 8x60'.
Rotary Dryers 8'8"x70', 7x50', 4x30'.
Roto-Louvre Dryers 11x36', 5x16'.
Raymond 30" Whizzer Separator.
Mikro Pulverizer #2 TH.
Dopp jktd. Agit. Kettles 1000, 1700 gal.
Pfaudler 500, 1000 gallon Reactors.
Petrochem Furnaces 9, 7, 5 & 2 MM/BTU.
Stokes DDS2 and BB2 Tablet Presses.
Rotex Screens, 60x84, 40x84 & 30"x96".
Shriver 30" P&F Filter Presses C.I.
Dixie Mogul Hammermill #5060.
Swenson 24"x20' jktd. Crystallizers.

HEAT & POWER CO., INC.
60 E. 42nd St., N. Y. 17 MU 7-5280

ECH SPECIALS

Blaw Knox 100 gal. Autocl'e, 347SS, 1000 PSI.
Battery of 3 Rotex 20x48 Sifters with Mtr.
Oliver 316 SS Filter 6' dia., 25 sq. ft. cap.
Fractionating Column 316 SS, 2½'x22'.
General Amer. 42"x120" Twin Drum Dryer.
Simpson 18" Lab. Mix Muller with mtr.
Pfaudler 1500 gal. Glass Tank; closed top.
Day #9 Cincinnatus J'ktd Mixer, 20 hp mtr.
Abbe 5'x6' Jktd. Ball Mill, chr. mang. steel.

WE BUY COMPLETE PLANTS OR SINGLE UNITS
New Machinery Div. for New Fabrications
Tel. SOuth 8-4451—4452—8782
YOU CAN BANK ON

Equipment Clearing House, Inc.
111 33 Street, Brooklyn 32, N.Y.

REBUILT

Karl Kiefer, 7 spouts, Visco Filler.
M R M, model B, 6 spouts, Vacuum Filler.
Elgin, model H, Filler, Cap Dropper and Capper.

San-i-Tank, stainless, 50 gals., jacketed, 125 psi; exp. agitator.

Stokes Granulator, exp. motor.
Tri-Homo #4 Disperser, exp. motor.
Premier 3" and 6" Colloid Mills.

IRVING BARCAN COMPANY
249-51 Orient Ave. Jersey City 5, New Jersey

FOR IMPOSSIBLE BUDGETS

MONEL DRYER
Louisville 54" x 35' long Rotary Monel Steam Tube Dryer. 1126 sq. ft. heating surface. 150# pressure. Code construction. New 1954.
USED ONLY 1 YEAR
Wire or phone collect—GA 1-1380

MACHINERY AND EQUIPMENT CO.
123 Townsend St. · San Francisco 7, Calif.

BUY with Confidence

OUTSTANDING MACHINERY-RIGHT NOW! WHEN YOU NEED IT!!

3—Sparkler model 33-S-17 rubber lined filters.

5—High Speed 3 roll mills 14" x 30", 9" x 24", 6" x 14", 4½" x 10", 4" x 8".

1—Stokes vacuum shelf dryer model 138-B, stainless steel shelf.

2—Vertical stainless steel tanks 1200, 1000 gallons.

1—75 gallon nickel clad jacketed and agitated reactor.

1—35 gallon silver lined jacketed and agitated reactor.

1—400 gallon stainless steel jacketed and agitated reactor.

3—Stokes model 212-G Micro vac vacuum pumps.

6—Rotex sifters 20" x 48", 40" x 84", 40" x 120", single and double deck.

1—12" x 12" stainless steel filter press.

4—Stokes tablet presses models F, E, RD-3, BB-2.

Write or Phone Your Inquiries

chemical & process machinery corp.
52 Ninth St.
Brooklyn 15, N.Y.
HYacinth 9-7200

MIXERS—3 qt. double sigma (new)—10 gal. Bramley jacketed/vac, w/5 HP—12 gal. double sigma—40 gal. S/S pony.

MIKRO PULVERIZERS—Bantam (1 HP) vari-feed—4TH w/50 HP, Mikro collector 36-84 unused.

SCREENS—12"x60" S/S, single—28"x 28", 3'x3' S/S gyrocentric—20"x84", 20"x96", 40"x66", 40"x84" Rotex.

25—S/S Centrifugal Pumps w/3 HP Xproof motors.

DRYER—Vac. shelf, Devine, 13 shelves 59"x78".

AIR CLASSIFIERS—30" (2 HP)—5' (3 HP) Gayco—36" Sturtevant (2 HP).

AIR COMPRESSORS—7-½ CFM/2 HP auto. w/receiver—45 CFM/10 HP, vee drive.

LAWLER COMPANY
LAWLER PLACE METUCHEN, N. J.
LIBERTY 9-0245

Business Wants and Offers

RATES PER INSERTION—PAYABLE IN ADVANCE (Not Subject to Agency Commission)

ALL CLASSIFIED ADVERTISEMENTS—$8.00, thirty-six words or less; $1.50 for each additional six words or fraction.

NO DISPLAY—First two words printed in bold face type.

COPY DEADLINE—Wednesday Noon Preceding Date of Publication

Send replies to ads with box numbers to
OIL, PAINT AND DRUG REPORTER, 30 *Church St., New York 7, N. Y.*

CONTRACT WORK WANTED

Belgium chemical plant in Brussels area alongside canal to Antwerp, with equipment for processing of liquids and powders (grinding, drying, milling, blending, packing, etc . . .) wishes to diversify present production range or start new industrial activities covering Common Market countries. All types of co-operation (license, contract manufacturing or others) will be considered. All communications received will be treated confidentially. OPD 171.

Contract Fermentation. Have modern stainless steel fermenters. Handle bacterial, fungal and streptomyces fermentations, etc. Excellent Laboratory facilities OPD 152.

DISTRIBUTORSHIP WANTED

Our Company has long established national sales representation to the paint, plastic, printing ink and other protective and decorative coating industries. We want additional items on exclusive basis. We are willing to make a substantial investment if necessary. OPD 173.

EQUIPMENT OFFERED

For Sale: Four stainless steel Double Effect Evaporators, Blaw-Knox Co. (Buflovak) 608-708-840-1025 sq. ft. each; Mojonnier stainless steel Triple Effect Evaporator having 2085 sq. ft.; 5,000 gal. stainless Tank; 46" and 26" Suspended Centrifuges; Best Equipment Co., 1737 Howard St. Chicago 26, Illinois.

1—Tolhurst 26" S.S. Centrifuge, 2 speed Motor; 1—Tolhurst 40" S.S. Centrifuge, 2 speed Motor; 1—J. H. Day 50 cu. ft. S.S. Dry Powder Blender, complete with motor. George Equipment Company, 0-81 Pine Avenue, Fair Lawn, N. J. SW 6-5737.

MATERIALS OFFERED

Still Bottoms—Manufacturer offers wide variety of new type still bottoms available on continued basis from unique plant—6c. lb. bulk OPD 172.

POSITIONS OFFERED

Chemical Salesman, must be hard-working and aggressive. We can furnsh profitable and interesting resale items with facilities and delivery service unequalled, and also chemical specialties of our own manufacture. A real opportunity for a hard hitting salesman. Apply for appointment by letter giving full information. All replies guaranteed confidential. Joseph Turner & Co., Ridgefield, N.J.

SERVICES OFFERED

High Vacuum molecular distillation for large quantity runs on a toll basis. Separations without thermal hazard. Molecular Distillations, Inc., 527 Madison Avenue, New York 22. Tele: PLaza 3-6527.

Mixing Tank—S.S. 500 Gal.
2—Baker Perkins Stainless Steel, 2 arm, jacketed, vacuum, hydraulic tilt, 150 gal—40 HP, 100 gal—50 HP.
Stokes Tablet Press—R
Kettle—20 Gal. Lead Lined.
1—1000 gal. type 316 Pfaudler not jacketed.
Stainless Steel Ball Mill.
MACHINECRAFT CORP.
800 Wilson Avenue, Newark 5, New Jersey
Mitchell 2-7634

WANTED!
CHEMICALS DYES
PHARMACEUTICALS
SOLVENTS—OILS
INTERMEDIATES
PLASTICIZERS—WAXES
PIGMENTS—COLORS
PACKAGED ITEMS
EQUIPMENT—PLANTS
BY-PRODUCTS
SELL NOW!
TURN INVENTORIES INTO CASH!
Chemical Service Corporation
88 BEAVER ST. NEW YORK 5, N.Y.
Tel. Hanover 2-6970
Cable address "RETORTS" N. Y.

— WANTED FOR CASH —
Off Spec. Job-Lot Discontinued } = { Glycols (Any Type) • Plasticizers • Vegetable—Animal Oils
SURPLUS Used or Spoiled { { Solvents • Chemicals • Raw Materials & Finished Goods
Drum Lots to Tanker Lots . . . Any Quantity
Don't Throw Away Materials Which Are Seemingly Useless . . See Us First ! !
HIGHEST SPOT CASH PRICES PAID
CHEMSOL, INC., • Washington Ave. & Franklin St., New Market, N. J. • FLanders 1-3010 PLymouth 2-1140

we will buy your...
SURPLUS CHEMICALS
SOLVENTS • WAXES • OILS
RESINS • DRUGS • COLORS
WIRE OR PHONE FOR IMMEDIATE ACTION
All offers held in strictest confidence
Barclay CHEMICAL COMPANY, INC.
77 VARICK STREET NEW YORK 13, N.Y. WO 6-4533

Live Polio Vaccine

—Continued from page 5

completely replaced by the more easily administered oral vaccine were reported to be meeting with success.

Dr. Roderick Murray, director of the division of biologics standards of the National Institutes of Health, told the meeting that in the past two years there has been a gratifying rise in the potency of the average vaccine reaching the market, with increases of as much as fivefold or more.

Also, he added, another product which has recently attracted attention is a purified preparation. The advantages of purification are obvious, he said, and possibility of achieving higher potency through the concentration step used for such preparations is attractive.

Dr. A. D. Langmuir, chief of the epidemiology branch of the Communicable Disease Center, NIH, touched on the prospective competitive markets when he said: "This is a rapidly changing situation; there are ardent advocates of the Salk approach. I look for a lot of competition building up if Dr. Salk can produce a single shot that confers immunity. This is still to be developed, but I look for some surprises."

Hydrocarbon Buying

—Continued from page 4

as a chemical intermediate and as a cleaning fluid.

Halocarburos, S.A. will build plants for both "Freon" and carbon tetrachloride on an existing site owned by Industrias Quimicas de Mexico in Santa Clara, state of Mexico. It is expected that the plants will start operation about mid-1961.

The plant for "Freon" will have an approximate capacity of 3 million pounds a year and the carbon tetrachloride plant will produce about 4 million pounds a year. The two plants will represent a joint investment of about 15 million pesos ($1.2 million).

Sales of "Freon" will be handled through the existing distributor organizations in Mexico.

Industrias Quimicas de Mexico, S.A. presently produces carbon bisulfide, xanthates, sulfuric acid, oleum and ammonium sulfate at plants in Zacapu and Morelia, (Michiocan).

Advertisers' Index

Acme Hardesty Co. 65
Air Reduction Chemical Co. 37
Allied Chemical Corporation—Plastics Division 48
Allied Chemical Corporation, Solvay Process Division 33
American Cyanamid Company, Fine Chemicals Department 17
American Cyanamid Company, Process Chemicals Department 42
American Firstoline Corporation 41
American Lignite Products Co. 64
American Maize-Products Company 47
Argueso, M., & Co., Inc. 65
Ashcraft-Wilkinson Co. 51

Baker, J. T., Chemical Co. 1, 2
Barcan, Irving, Company 69
Barclay Chemical Company, Inc. 70
Bareco Wax Co. Division Petrolite Corporation 61
Becco Chemical Division, Food Machinery & Chemical Corp. 41, 42
Berkshire Chemicals, Inc. 45
Better Finishes & Coatings, Inc. 40
Bios Laboratories, Inc 54
Blackman, Stanley, Labs, Inc. 56
Blockson Chemical Company 40
Bower, Henry, Chemical Mfg. Co. 44
Bowman, Charles, & Co. 54
Brill Equipment Company 68
Brode Corporation, The 65

California Chemical Company, Oronite Division 27
Celanese Corporation of America, Chemical Division 14, 72
Chemical Manufacturing Co., Inc. 43
Chemical & Process Machinery Corp. 69
Chemical Service Corp. 70
Chemical Solvents, Inc. 72
Chemsol, Inc. 70
Columbia Southern Chemical Corporation 40
Commercial Solvents Corporation 1
Coupe, Robert A. 43
Cowles Chemical Company 35
Croda, Incorporated 65

Darling & Co. 65
Darlington Chemicals, Inc. 54
Dawe's Laboratories, Inc. 58
Delhi-Taylor Oil Corp. 18
Dickinson, J. Q., & Co. 55
Diehl, Wm., & Co. 65
Distillation Products Industries, Div. of Eastman Kodak Company 39
Dow Corning Corporation 30
Drum Parts, Inc. 60
DuPont de Nemours, E. I., & Co., (Inc.) 49, 50
Duval Sulphur & Potash Co. 9a

Eastman Chemical Products, Inc. 21, 62
Eco Engineering Co. 42
Emery Industries, Inc. 62, 64
Equipment Clearing House, Inc. 69
Esso Standard, Division of Humble Oil & Refining Company 32

Fairmount Chemical Co., Inc. 44
Felton Chemical Company, Inc. 60
First Machinery Corp. 67
Fisher Chemical Co., Inc. 72
Florasynth Laboratories, Inc. 58
Food Machinery & Chemical Corporation, Chemicals & Plastics Division 29
Fritzsche Brothers, Inc. 58

Gelb, R., & Sons, Inc. 66, 69
General Mills, Inc. 63
General Smelting Co. 43
Glyco Chemicals Division, Charles L. Huisking & Co., Inc. 52
Greeff, R. W., & Co. 36
Gulf Oil Corporation 19, 50

Hampshire Chemical Co. 57
Harchem Division, Wallace & Tiernan, Inc. 64
Harshaw Chemical Co., The 52
Heat & Power Co., Inc. 67, 69
Heico, Inc. 45
Henry, J. F., Chemical Co., Inc. 45
Hercules Powder Company, Incorporated 49
Heyden Chemical Division, Heyden Newport Chemical Corporation 13
Hoffmann-La Roche, Inc. 53
Hooker Chemical Corporation 41
Hutchinson, D. W., & Co., Inc. 58

Inland Steel Container Company 51
International Petrosolvents, Inc. 47

Jefferson Chemical Company, Inc. 47, 49, 63

Kay-Fries Chemicals, Inc. 54
Laplace, L. J., & M. 45
Lawler Company 69
Lebanon Chemical Co. 51
Lemke, B. L., & Co., Inc. 55
Lever Brothers Company 46
Loeb, H., & Son 67
Loeb Equipment Supply Co. 60
Lucidol Division, Wallace & Tiernan, Incorporated 57

Machinecraft Corp. 66, 70
Machinery & Equipment Company 66, 67, 69
Machinery & Equipment Co., The 66
Magnus, Mabee & Reynard, Inc. 58
Metalsalts Corporation 53
Michigan Chemical Corporation 26
Miles Chemical Company Division, Miles Laboratories, Inc. 12
Minute Maid Corporation, Citrus Products Division 59
Mississippi Lime Company 44
Montrose Chemical Company 38
Morton Chemical Company 8
Mutual Citrus Products Company 24

Nepera Chemical Co., Inc. 54
Neville Chemical Company 72
Newark Steel Drum Co. 44
Newport Industries Division, Heyden Newport Chemical Corporation 31
Norda Essential Oil & Chemical Company, Inc. 18

Old Dutch Mustard Co., Inc. 60
Olin Mathieson Chemical Corporation Chemicals Division 47

Page, Charles, & Co., Inc. 50
Pan American Sulphur Company 44
Penick, S. B., & Company 58
Pennsalt Chemicals Corporation, Industrial Division 1
Perry Equipment Corp. 68
Pfaltz & Bauer, Inc. 56
Pfister Chemical Works, Inc. 20
Pfizer, Charles & Company 23
Pharmacaps, Inc. 55
Phelps Dodge Refining Corporation 44
Philadelphia Ampoule Laboratories, Inc. 56
Philadelphia Quartz Company 45
Philipp Brothers Chemicals, Inc. 41
Plastics Division, Allied Chemical Corporation 48
Polak's Frutal Works, Inc. (PFW) 60
Prior Chemical Corporation 1
Process Plants Service, Inc. 67
Procter & Gamble Co. 46
Publicker Industries, Inc. 11

Quaker State Oil Refining Corp. 65

Raney Catalyst Co. 46
Read, Chas. L., & Co., Inc. 62
Reilly Tar & Chemical Corporation 6
Republic Chemical Corporation 41
Republic Steel Corporation 50
Riches-Nelson, Inc 72
Richter, Gedeon Pharmaceutical Products, Inc. 56
Ritter, Dr., & Company 55
Robeco Chemicals, Inc. 72
Rohm & Haas Company 47
Ross, F. H., & Co. 43

Sergeant, E. M., Pulp & Chemical Co., Inc. 72
Shamrock Chemical Corporation 65
Shell Oil Company 61
Smith-Douglass Company, Inc. 42
Smith, George B., Chemical Works 63
Smith, Werner G., Inc. 64
Spencer Chemical Company 46
Standard Collapsible Tube Co. 55
Stauffer Chemical Company 43
Stein Equipment Co. 67
Synthetic Products Company 63

Tennant Chemical Division, Tennant Development Corporation 47
Tennessee Corporation 34

Union Carbide Chemicals Company, Division of Union Carbide Corporation 1
United Box & Lumber Co. 66
U. S. Borax & Chemical Corporation 1
U. S. Steel Corp. 49
United Ultramarine & Chemical Company, Inc. 63

van Ameringen-Haebler, Division of International Flavor & Fragrances, Inc. 60
Ventura Processors 25

Welch, Holme & Clark Company, Inc. 65
Wolf, Bill, Inc. 67
Wood Ridge Chemical Corporation 44
Wyandotte Chemicals Corporation 42

OPD's Advertising Staff
PRODUCTION: Claire Shannon
BUYERS DIRECTORY: Helen Lohse
NEW YORK (RE 2-9820)—Alexander Kane, Edwin F Novy Bronson Philhower
CLEVELAND (LOng 1-5044)—Henry G. Seed, 17717 Lomond Boulevard, Cleveland 22, Ohio
MIAMI (FRanklin 9-2668)—John Printup & Associates, Langford Building, Miami 32, Fla.
DALLAS (DAvis 1-0898)—John Printup & Associates, 2607 Milmar Drive, Dallas 28, Tex.
LOS ANGELES (DUnkirk 7-4388)—Robert W. Walker Company, 730 South Western Avenue, Los Angeles 5, Calif.
SAN FRANCISCO (SUtter 1-5568)—Robert W. Walker Company, 57 Post Street, San Francisco

Maleic: Capacity No Worry

—Continued from page 3

firm despite the fact that there's a lot of idle capacity around.

For the future, the Heyden chief executive sees his firm faring "proportionately better than the chemical industry as a whole" in 1961. Specifically, he has a 10 percent annual sales increase targeted for the next five years.

Making this possible, Mr. Askin points out, will be Heyden developments in these areas:

- **Agricultural Chemicals.** Heyden expects to step up sales for its "Strobane" pesticide and its specialty trichlorobenzoic acid herbicide. It's not ready to set up its own marketing organization for farm chemicals, but will continue to work through distributors.
- **Paper Chemicals.** The company will supplement its position as a supplier of paper size by offering a line of other paper chemicals, such as slimicides.
- **Rubber Chemicals.** In addition to its line of rosin-derived emulsifiers, Heyden expects to offer a line of rubber compounders. Coming up in the next few months: a new anti-oxidant and a new anti-ozonant.
- **Metallic Salts.** Its Nuodex Division, which has been selling a specialty nickel catalyst for the food processing industry, hopes to augment this line.
- **Coatings Materials.** The Heyden Division expects shortly to be selling part of the output of the firm's new benzoic acid plant to alkyd resin manufacturers. Nuodex is "fairly close to offering commercially" a non-mercurial paint fungicide.

IMPORTS at United States Ports

New York

ACETYLACETONE—20 cs, Henley & Co, Hamburg
AGAR—10 bbls, J J Duffy, Barcelona
ALBUMIN—300 bgs, P A Gaynar, Rotterdam
ALGINIC ACID—25 cks, E Mendell, Havre
ALUMINUM PASTE—50 pails, Crescent Bronze Powder Co, Hamburg
ALUMINUM POWDER—20 dms, Aluminum Co of America, Rotterdam
ALUMINUM SILICATE—30 bgs, Engelhard Industries, Bremen
ALUMINUM SULFATE—500 bgs, Bremen
AMBER OIL—2 dms, S B Penick & Co, Puerto Cortes
AMMONIUM CARBONATE—140 cs, American British Chemical Supplies, Glasgow
160 dms, Philipp Bros Chemicals, Rotterdam
AMOBARBITAL—10 dms, Copenhagen
ANILINE DYES—16 dms, H Bruckmann & Lorbacher, Bremen
6 dms, Putnam Chemical Corp, Bremen
31 dms, Geigy Chemical Corp, Rotterdam
21 dms, Carbic Hoechst Corp, Rotterdam
57 dms, Rotterdam
ANNATTO SEED—20 bgs, Marichal Kenez, Puerto Plata
ANTIMONIC ACID—1 cs, Celanese Corp of America, London
ANTIMONY—20 cks, Watson Geach, Liverpool
420 cs, Liverpool
ANTIMONY OXIDE—605 bgs, National Lead Co, Liverpool
ANTIMONY SULFIDE—15 dms, Indussa Corp, Antwerp
ASBESTOS FIBER—800 bgs, Philip Carey Co, Lourenco Marques
2,600 bgs, Johns Manville Corp, Durban
ASCORBIC ACID—100 dms, Genoa
20 dms, Copenhagen
BARIUM SULFATE—6 cs, Picker x-Ray Corp, London
BEESWAX—25 bgs, Lenape Trading Co, Puerto Plata
25 bgs, Machado & Co, Ciudad Trujillo
65 bgs, Koster Keunen, Casablanca
31 bgs, Transmarine Mercantile Co, Port Au Prince
17 bgs, Lenape Trading Co, Port Au Prince
11 bgs, Smith & Nichols, Port Au Prince
98 bgs, Duncan Fox & Co, Talcahuano
11 bls, Progreso
23 bgs, Havana
BERGAMOT OIL—20 hf cs, Citrus & Allied Essential Oils Co, Messina
40 hf cs, Lo Curto & Funk, Messina
8 hf cs, Messina
BLEACHING POWDER—113 dms, Chemical Manufacturing Co, Liverpool
BOIS DE ROSE OIL—5 dms, Analy Corp, Manaus
1 dm, Hollander Trading Corp, Manaus
BRONZE POWDER—20 dms, Crescent Bronze Powder Co, Hamburg
CADMIUM—100 cs, Rotterdam
110 cs, Antwerp
CALCIUM BORATE—5 bgs, Foundry Services Inc, Liverpool
CALCIUM CARBONATE—600 bgs, Pluess Staufer, Antwerp
3,800 bgs, Whittaker Clark & Daniels, Liverpool
CALCIUM HYPOCHLORITE—200 dms, Yokohama
CALCIUM LACTATE—10 dms, Copenhagen
CAMPHOR, SYNTHETIC—224 cs, P H Petry, London
CARAWAY OIL—13 dms, Norda Essential Oil & Chemical Co, Rotterdam
CARAWAY SEED—200 bgs, Sokol & Co, Gdynia
200 bgs, Rotterdam
CARBON TETRACHLORIDE—40 dms, Bell Chemical Co, Genoa
CARDAMOMS—8 cs, F N S Corp, London
CARMINE—4 dms, Chemical Bank, London
CARNAUBA WAX—218 bgs, S C Johnson & Son, Fortaleza
56 bgs, Cornelius Wax Refining Corp, Fortaleza
277 bgs, J W Hanson & Co, Fortaleza
111 bgs, Fortaleza
CASEIN—3,000 bgs, E Lang, Buenos Aires
5,122 bgs, A J Mills & Co, Auckland
1,000 bgs, Buenos Aires
CASSIA—1,250 bls, R J Spitz, Saigon
475 bls, A G Dunn, Saigon
546 bls, C M Van Sillevoldt, Tandjong Priok
79 bls, Rotterdam
CASTOR OIL—600 tons, Anderson Clayton & Co, Santos
500 tons, Brazil Oiticica Inc, Fortaleza
140 tons, Irving Trust Co, Fortaleza
CHESTNUT EXTRACT—600 bgs, Chase Manhattan Bank, Naples
CHLORINATED RUBBER—200 bgs, C M C Chemicals Inc, Liverpool
CINNAMON LEAF OIL—5 cs, Volkart Bros, Galle
CINNAMON QUILLS—51 bls, Fritzsche Bros, Colombo
25 bls, Wm E Martin & Son, Colombo
CITRONELLA OIL—50 dms, Lo Curto & Funk, Keelung
150 dms, George Uhe Co, Keelung
COCONUT OIL—907 tons, Pacific Vegetable Oil Corp, Manila
COCONUT OIL FATTY ACID—30 dms, Heemsoth Kerner, Aarhus
COCONUT SHELL CARBON—278 bgs, Connor Engineering Corp, London
CODLIVER OIL—25 tons, Dyson Shipping Co, Reykjavik
COLORS, DRY—1,200 bgs, Naftone Inc, Bremen
COPAIBA BALSAM—9 dms, H Weber & Co, Manaus
COPAL GUM—134 bgs, Wm H Scheel, Manila
CORIANDER SEED—625 bgs, M J Golombeck, Haifa
1,000 bgs, Kenitra
783 bgs, Buenos Aires
CORN STARCH—2,840 bgs, Impex Agricultural Corp, Rijeka
1,000 bgs, Geismar & Co, Bremen
2,550 bgs, Rotterdam
CREAM OF TARTAR—100 bbls, H Marmorek & Son, Barcelona
CUBEB BERRIES—44 bgs, Singapore
CUMIN SEED—600 bgs, Middleton & Co, Khorramshahr
272 bgs, M J Golombeck, Khorramshahr
200 bgs, Delano Corp of America, Khorramshahr
300 bgs, C M Van Sillevoldt, Khorramshahr
873 bgs, Khorramshahr
CUTTLE FISH BONE—300 cs, Venice
100 cs, Yokohama
DEGRAS—120 dms, Malmstrom Chemical Corp, Manchester
52 dms, Malmstrom Chemical Corp, Dublin
10 dms, R I T A Chemical Corp, Rotterdam
45 dms, Malmstrom Chemical Corp, Rotterdam
DEXTRIN—768 bgs, Stein Hall & Co, Rotterdam
885 bgs, Manufacturers Trust Co, Rotterdam
DIACETYL—20 cs, Lo Curto & Funk, Hamburg
14 cs, H A Gogarty, Rouen
3 cs, Ungerer & Co, Antwerp
DIBUTYL OXALATE—1 dm, Henley & Co, Hamburg
DICYANDIAMIDE—4,410 bgs, Mitsui & Co, Yokohama
500 bgs, Hudson Shipping Co, Yokohama
DYES, COALTAR—211 dms, H Bruckmann & Lorbacher, Hamburg
23 dms, Orlex Dyes & Chemical Corp, Hamburg
2 dms, H Bruckmann & Lorbacher, Hamburg
48 dms, Toms River Cincinnati Chemical Corp, Rotterdam
EARTH COLORS—450 bgs, Naftone Inc, Bremen
900 bgs, Naftone Inc, Rotterdam
870 bgs, United Ultramarine & Chemical Co, Rotterdam
ETHYLENE BRASSYLATE—1 cs, Citrus & Allied Essential Oils Co, Kobe
FENUGREEK SEED—100 bgs, Kenitra
FERRIC SULFATE—75 dms, Liverpool
FISHLIVER OIL—3 dms, Arista Oil Products Corp, Yokohama
5 dms, Mitsubishi Corp, Yokohama
FUEL OIL—116,470 bbls, Shell Caribbean Petroleum Co, Punta Cardon
235,941 bbls, Hess Inc, Punta Cardon
121,684 bbls, Hess Inc, Maracaibo
198,034 bbls, Humble Oil Co, Las Piedras
276,093 bbls, Humble Oil Co, Aruba
92,131 bbls, Metropolitan Petroleum Corp, Punta Cardon
88,533 bbls, Royal Petroleum Corp, Punta Cardon
121,500 bbls, American Oil Co, Aruba
FUMARIC ACID—13 kgs, Humble Oil Co, London
FURFURAL—890 tons E I Dupont De Nemours & Co, La Romana
GARLIC OIL—5 cs, Magnus Mabee & Reynard, Kobe
GELATIN—300 bgs, King Shipping Co, Hamburg
2000 bgs, First National Boston, Hamburg
100 bgs, Manhattan Adhesives Corp, Rotterdam
100 bgs, Medico Chemical Corp, Rotterdam
130 bgs, Transatlantic Animal By-Products Corp, Rotterdam
240 bgs, Northern Adhesives, Bremen
35 dms, H Bruckmann & Lorbacher, Rotterdam
200 bgs, T M Duche & Son, Antwerp
152 dms, Corbett & Co, Marseille
200 dms, Franco Belgian Corp, London
300 bgs, King Shipping Co, Gothenburg
151 bgs, Gothenburg
GERANIUM OIL—3 cks, Polarome Manufacturing Co, Marseille
1 dm, Roure-Dupont Inc, Algiers
GLUESTOCK—96 bls, Atlantic Gelatine Co, Buenos Aires
415 bls, Barranquilla
GRAPEFRUIT OIL—5 cs, H Marmorek & Son, Haifa
GRAPHITE—250 bgs, Joseph Dixon Crucible Co, Colombo
250 bgs, C Pettinos, Colombo
GUAR GUM—2,069 bgs, Stein Hall & Co, Karachi
600 bgs, General Mills Inc, Karachi
4,500 bgs, Stein Hall & Co, Calcutta
GYPSUM, CRUDE—20,024 tons, U S Gypsum Co, Hantsport
8,519 tons, Allied Chemical Corp, Halifax
1,950 tons, National Gypsum Co, Walton
15,722 tons, National Gypsum Co, Halifax
HYDRAZINE HYDRATE—50 pails, E F Drew & Co, Bremen
HYDROXYCITRONELLAL—6 cs, Citrus & Allied Essential Oils Co, Kobe
ICTHAMMOL—6 dms, Chas L Huisking & Co, Hamburg
INVERTASE CONCENTRATE—20 cs, White Stokes Co, Liverpool
IODINE, CRUDE—40 dms, D Hauser, Yokohama
IRISH MOSS—100 bls, S B Penick & Co, Havre
IRON OXIDE—1,500 bgs, American Chemical & Pigment Corp, Malaga
20 bgs, Tarragona
ISLANDICUS MOSS—40 bls, Meer Corp, Rijeka
JAPAN WAX—50 cs, Strohmeyer & Arpe, Kobe
JUNIPER BERRIES—84 bgs, K H Landes & Co, Leghorn
LACTIC ACID—20 cbys, Kolon Trading Co, Hamburg
LACTOSE—20 dms, Rotterdam
LAUREL LEAVES—136 bls, M J Golombeck, Piraeus
LAVANDIN OIL—30 cks, Brown Bros, Cannes
17 cks, Polarome Manufacturing Co, Marseille
40 dms, Tombarel Products Co, Cannes
5 dms, Yarley of London, Cannes
2 kgs, Beirut
3 dms, Cannes
LEAD, RED—520 bgs, Rotterdam
LEMON OIL—76 dms, Fritzsche Bros, Hamilton
4 cs, Fritzsche Bros, Hamilton
1 dm, Felton Chemical Co, Vera Cruz
1 dm, Ungerer & Co, Vera Cruz
LEMONGRASS OIL—12 dms, Maywood Chemical Works, Cochin
LEVULOSE—16 dms, Nutritional Biochemical Corp, Hamburg
LOCUST BEAN GUM—500 bgs, J L Quesada, Portimao
50 dms, T M Duche & Son, Bremen
50 bgs, T M Duche & Son, Rotterdam
LOGWOOD EXTRACT—66 dms American Dyewood Co, Kingston
MAGNESITE—605 bgs, Cochin
MAGNESITE, DEADBURNED—1,000 bgs, Salvador
MALEIC ANHYDRIDE—13 kgs, Allied Chemical Corp, London
MANDARIN OIL—2 cs, Messina
MANGROVE BARK—1,010 bgs, Chemical Bank, Dar es Salaam
MELAMINE—100 bgs, Hudson Shipping Co, Yokohama
MENTHOL—8 cs, Felton Chemical Co, Keelung
50 cs, Magnus Mabee & Reynard, Keelung
25 cs, DeBear Inc, Santos
25 cs, Keelung
4 kgs, Cannes
MERCURIC OXIDE—100 cs, Troy Chemical Co, Rotterdam
5-METHYL-3-SULFANILAMIDE ISOXAZOLE — 40 dms, Hoffmann-La Roche Inc, Kobe
MOLASSES—486 tons, Pacific Molasses Co, Salaverry
MOLASSES, BEET—11,926 tons, Constantza
MONOCHLOROACETIC ACID—1,377 dms, International Selling Corp, Marseille
MONTAN WAX—200 bgs, Frank B Ross, Hamburg
MUSTARD SEED—1,000 bgs, D F Young, Aarhus
1,000 bgs, R T French, Aarhus
2,056 bgs, R T French, Copenhagen
1,000 bgs, M J Golombeck, Copenhagen
500 bgs, Berns & Koppstein, Copenhagen
700 bgs, Copenhagen
MYROBALANS EXTRACT—325 bgs, Tanimex Corp, Liverpool
NAPHTHALENE—500 bgs, Gallard Schlesinger, Antwerp
200 bgs, Hudson Shipping Co, Antwerp
1,200 bgs, J N Forker, Liverpool
1,686 bgs, Witco Chemical Co, Liverpool
558 bgs, Liverpool
2,309 bgs, Antwerp
NAPHTHENIC ACID—68 dms, Imperial Oil Ltd, Barranquilla
NAPHTHOL—20 dms, Wedeman & Godknecht, Bremen
NIACINAMIDE—20 dms, Foster T Smith, Genoa
NICKEL FORMATE—600 bgs, Archer Daniels Midland Co, Bremen
NUTMEG—70 bgs, Calx American Co, Singapore
OCHRE—448 bgs, Whittaker Clark & Daniels, Mossel Bay
1,120 bgs, Landers Segal Color Co, Mossel Bay
OCOTEA CYMBARUM OIL—75 dms, American Metagraph Co, Itajai
n-OCTYL CHLORIDE—12 dms, United Ultramarine & Chemical Co, Rotterdam
OLIVE OIL—25 dms, Old Monk Olive Oil Co, Marseille
200 dms, Strohmeyer & Arpe, Barcelona
295 dms, Swiss Credit Bank, Malaga
50 dms, Hanover Bank, Malaga
73 dms, National City Bank, Malaga
20 dms, Swiss Credit Bank, Tarragona
OPIUM—100 chts, Merck & Co, Calcutta
ORANGE OIL—2 dms, Citrus & Allied Essential Oils Co, Puerto Plata
OREGANO LEAVES—221 cks, H Marmorek & Son, Tampico
475 bgs, H Marmorek & Son, Piraeus
PALMKERNEL OIL—1,779 cs, B M T Commodity Corp, Rotterdam
PAPAIN—216 cs, Chas L Huisking & Co, Mombasa
34 cs, Bemo Shipping Co, Mombasa
50 cs, American Ferment Co, Colombo
48 cs, V A Cordovi, Colombo
PAPRIKA—400 bgs, Meer Corp, Hamburg
50 bgs, Piraeus
PARAFFIN—54 bgs, Hoechst-Ude Corp, Hamburg
PATCHOULI OIL—4 dms, Simpson Spence & Young, London
20 cs, International Flavors & Fragrances Inc, Penang
13 cs, Kane Import Corp, Penang
PECTIN—216 dms, T M Duche & Son, Copenhagen
PEPPER, BLACK—420 bgs, George Uhe Co, Singapore
640 bgs, Ludwig Mueller, Singapore
160 bgs, Ludwig Mueller, Alleppey
520 bgs, George Uhe Co, Cochin
320 bgs, A G Dunn, Cochin
400 bgs, Reliable Mercantile Co, Cochin
160 bgs, Mincing Trading Corp, Cochin
280 bgs, A G Dunn, Singapore
160 bgs, Internatio Rotterdam, Alleppey
160 bgs, A G Dunn, Alleppey
80 bgs, A A Sayia, Alleppey
610 bgs, Singapore
240 bgs, Cochin
PEPPER, RED—100 bgs, M J Golombeck, Kobe
364 bgs, Mombasa
178 bgs, Dar es Salaam
PESTICIDE—25 dms, European Chemical Co, London
PETROLEUM, CRUDE—272,097 bbls, California Oil Co, Sidon
261,595 bbls, Humble Oil Co, Puerto La Cruz
205,139 bbls, Pure Oil Co, Maracaibo
131,240 bbls, Leonard Refineries, Maracaibo
119,483 bbls, Sohio Petroleum Co, Maracaibo
PHENOBARBITAL—20 cs, Rotterdam
PIMENTO—25 bgs, Kellys America Ltd, Kingston
160 bgs, M J Golombeck, Kingston
160 bgs, Kingston
PIMENTO LEAF OIL—3 dms, Magnus Mabee & Reynard, Kingston
POLLACKLIVER OIL—20 dms, Wilbur Ellis Co, Yokohama
5 dms, Arista Oil Products Corp, Yokohama
POLYVINYL CHLORIDE RESIN—1,000 bgs, Nichimen Co, Nagoya
POPPYSEED—150 bgs, J Bieyer, Gdynia
150 bgs, Ideal Trading Co, Gdynia
200 bgs, Globe Products Co, Gdynia
150 bgs, Levy & Levis Co, Gdynia
250 bgs, R J Spitz, Gdynia
250 bgs, American Almond Products Co, Gdynia
250 bgs, Louis Furth, Gdynia
300 bgs, Levy & Levis Co, Rotterdam
100 bgs, Rotterdam
POTASH, CAUSTIC—234 dms, B T Chemco Inc, Gothenburg
POTASSIUM CHLORATE—100 dms, Ugine Industries, Havre
POTASSIUM SILICATE—6 dms, Stulz-Sickles Co, London
PYRETHRUM FLOWERS—125 bls, Mombasa
QUEBRACHO EXTRACT—524 bgs, International Products Corp, Buenos Aires
5,061 bgs, American Tanners Ltd, Buenos Aires
1,031 bgs, Barkey Importing Co, Buenos Aires
RAUWOLFIA SERPENTINA ROOT—91 bgs, Meer Corp, Bangkok
RICE STARCH—236 bgs, Rotterdam
SANDALWOOD OIL—5 cs, Lo Curto & Funk, Cochin
4 cs, Florasynth Lab, Cochin
5 cs, Givaudan Corp, Cochin
3 cs, Noville Essential Oil Co, Cochin
SAPONIN—10 dms, Karr Ellis, Liverpool
SEEDLAC—400 bgs, Wm Zinsser & Co, Calcutta
400 bgs, Gillespie Rogers Pyatt, Calcutta
1,000 bgs, United Shellac Corp, Calcutta
500 bgs, C H Timm, Calcutta
SESAME OIL—79 dms, I R Boody & Co, Copenhagen
SESAME SEED—600 bgs, Ideal Trading Co, Massawa
38 bgs, Ideal Trading Co, Puerto Barrios
SHELLAC—200 bgs, Wm Zinsser & Co, Calcutta
100 bgs, Haeuser Shellac Co, Calcutta
SODA, CAUSTIC—180 dms, B T Chemco Inc, Gothenburg
14 cs, B T Chemco Inc, Gothenburg
SODIUM ALGINATE—50 dms, Stein Hall & Co, Glasgow
SODIUM BICARBONATE—300 bgs, Chemical Manufacturing Co, Liverpool
SODIUM CYANIDE—252 dms, Ugine Industries, Havre
400 dms, Chemical Manufacturing Co, Glasgow
280 dms, American Cyanamid Co, Liverpool
200 dms, Chemical Manufacturing Co, Liverpool
SODIUM CYCLAMATE—20 dms, Frank Samuel & Co, Yokohama
SODIUM FERROCYANIDE—280 bgs, Antwerp
SODIUM SILICOFLUORIDE—650 bgs, Copenhagen
SODIUM SULFATE, ANHYDROUS—3,500 bgs, Lo Curto & Funk, Antwerp
STARCH—1,000 bgs, Manufacturers Trust Co, Rotterdam
750 bgs, Morningstar Paisley Inc, Rotterdam
STRYCHNINE SULFATE—2 cs, Havre
SULPHONIC ACID—1 dm, Procter & Gamble Co, Haifa
TAPIOCA FLOUR—4,000 bgs, C & W Trading Co, Itajai
3,666 bgs, Stein Hall & Co, Itajai
1,103 bgs, American Metagraph Co, Itajai
3,135 bgs, Manhattan Adhesives Corp, Penang
50 bgs, Corte & Co, Salvador
THIOUREA—600 bgs, Irving Trust Co, Moji
600 bgs, International Chemical Corp, Yokohama
TITANIUM DIOXIDE—40 bgs, Havre
TOLU BALSAM—4 dms, George Lueders & Co, Puerto Barrios
TRAGACANTH GUM—213 bgs, Meer Corp, Khorramshahr
15 cs, Am-Iran Corp, Khorramshahr
362 bgs, Khorramshahr
TRICHLOROETHYLENE—76 dms, Chemical Manufacturing Co, Liverpool
200 dms, Leghorn
ULTRAMARINE BLUE—140 bgs, Whittaker Clark & Daniels, Liverpool
UREA—5,000 bgs, H J Baker & Bro, Antwerp
VANILLA BEANS—76 cs, Marseille
VEGETABLE OIL—55 dms, Heemsoth Kerner, Aarhus
WATTLE EXTRACT—112 bgs, International Products Corp, Mombasa
1,303 bgs, Hammond & Carpenter, Durban
ZINC OXIDE—1,000 bgs, Aceto Chemical Co, Liverpool
ZINC YELLOW—200 bgs, Revelli Chemicals, Antwerp
ZIRCONIUM OXIDE—5 dms, Magnesium Elektron Inc, Liverpool

Los Angeles

ALUMINUM PASTE—50 cs, Crescent Bronze Powder Co, Hamburg
CARAWAY SEED—100 bgs, B C Ireland, Amsterdam
CASEIN—200 bgs Borden Chemical Co, Buenos Aires
CASSIA—168 bls, Djakarta
CINNAMON QUILLS—20 bls, Frismoco American Co, Colombo
35 bls, Mincing Trading Corp, Colombo
COPAL GUM—80 bkts, Djakarta
COPRA—500 tons, American Trust Co, Dumaguete
DAMMAR GUM—70 bgs, O G Innes Corp, Singapore
EARTH COLORS—1,800 bgs, Naftone Inc, Antwerp
220 bgs, H Hartry, Amsterdam
100 bgs, Antwerp
FENNEL SEED—56 bgs, Hismoco American Co, Bombay
FISHMEAL—4,348 bgs, Marine & Animal By-Products Corp, Callao
2,392 bgs, F P Dow, Callao
5,174 bgs, Star Kist Foods, Callao
5,331 bgs, Chimbote
FUEL OIL—77,418 bbls, Texaco Co, Point a Pierre
70,000 bbls, Standard Oil Co, Aruba
GYPSUM, CRUDE—16,231 tons, Kaiser Gypsum Co, San Marcos
KARAYA GUM—76 bgs, Hathaway Allied Products, Bombay
LIVERMEAL—444 bgs, Cap Sales Corp, Buenos Aires
MOLASSES—8,734 tons, Pacific Molasses Co, Corinto
NAPHTHA—14,839 bbls, Texaco Co, Point a Pierre
51,023 bbls, Caminol Oil Co, Point a Pierre
PEPPER, RED—50 bgs, Hismoco American Co, Yokohama
PETROLEUM, CRUDE—299,227 bbls, Willshire Oil Co, Bandar Mashur
QUEBRACHO EXTRACT—400 bgs, Barkey Importing Co, Buenos Aires
SEAWEED—195 bls, American Agar & Chemical Co, Antwerp
TAPIOCA FLOUR—1,010 bgs, H M Newhall & Co, Bangkok

Philadelphia

ARSENIC—62 bbls, Skelleftehamn
BONE—81 tons, Velleman Corp, Buenos Aires
CALCIUM CARBONATE—1,200 bgs, Antwerp
CASEIN—4,500 bgs, National Casein Co, Buenos Aires
1,232 bgs, National Casein Co, Melbourne
FUEL OIL—100,000 bbls, Mobil Oil Co, El Palito
GYPSUM, CRUDE—11,041 tons, National Gypsum Co, Halifax
HEXANOL—120 dms, Hamburg
LICORICE ROOT—6,829 bgs, Bushire
PERCHLOROETHYLENE—50 dms, International Selling Corp, Marseille
PETROLEUM, CRUDE—230,776 bbls, Mobil Oil Co, Covenas
113,292 bbls, Mobil Oil Co, Puerto La Cruz
109,907 bbls, Mobil Oil Co, Amuay Bay
177,923 bbls, Gulf Oil Corp, Bachaquero
196,895 bbls, Gulf Oil Corp, Puerto La Cruz
QUEBRACHO EXTRACT—400 bgs, Barkey Importing Co, Buenos Aires
962 bgs, Tanimex Corp, Buenos Aires
RUTILE SAND—4,000 bgs, Brisbane
TAPIOCA FLOUR—662 bgs, Stein Hall & Co, Itajai
1,322 bgs, Stein Hall & Co, Kohsichang
VANILLA BEANS—26 cs, Marseille
ZIRCON SAND—2,972 bgs, Newcastle
2,960 bgs, Brisbane

San Francisco

ANIMAL CHARCOAL—960 bgs, Glasgow
BLEACHING POWDER—100 dms, D Hicks, Rotterdam
BRONZE POWDER—20 dms, Wedeman & Godknecht, Manchester
CALCIUM NITRATE—4,000 bgs, Atkins Kroll & Co, Amsterdam
COPRA—500 tons, Cargill Inc, Cagayan de Oro
250 tons, Toftman Corp, Iloilo
500 tons, Pacific Vegetable Oil Corp, Manila
500 tons, Pacific Vegetable Oil Corp, Masbate
250 tons, Toftman Corp, Davao
700 tons, Pacific Vegetable Oil Corp, Davao
500 tons, Cargill Inc, Pangi
CORN STARCH—150 bgs, Geismar & Co, Amsterdam
DEXTRIN—600 bgs, Arabol Manufacturing Co, Amsterdam
GYPSUM, CRUDE—15,822 tons, Kaiser Gypsum Co, San Marcos
LOCUST BEAN GUM—150 bgs, Genoa
MACE—28 cs, Hismoco American Co, Singapore
NUTMEG—64 bgs, Hismoco American Co, Singapore
OLIVE OIL—75 dms, A Giurlani, Leghorn
SAGE LEAVES—60 bgs, Hismoco American Co, Bremen
SODIUM PERBORATE TETRAHYDRATE—900 bgs, Bremen
TALC—500 bgs, Charles Mathieu, Genoa
UREA—8,750 bgs, Atkins Kroll & Co, Amsterdam
ZINC SULFATE—100 bgs, P W Bellingall, Antwerp

Bids Wanted

Drugs, Phenylazopyridine Hydrochlorides Tablets, 0.1 gm., 50S, 27,432 bots., Bid IFB 32-91-91B, Dec. 12. An additional quantity is being reserved for small business under a partial set-aside. **Tenanus and Diphtheria Toxoids,** combined 5 ec. for adult use, 245,760 bots., Bid RFB 7958Q, Dec. 12. **Urine Sugar Test Tablets,** 100s, 43,632 bots., Bid RFP 7975Q, Dec. 12 **Hydrogen Peroxide Solution,** USP 1 lb. 94,200 bots., Bid RFP 7963Q, Dec. 14. An additional quantity is being reserved for small business under a partial set aside. **Military Medical Supply Agency,** 3rd Ave and 29 St., Brooklyn 32, NY.
Isopropyl Alcohol, NF 5 gal., 1,400 drums, Bid IFB M5-55-61, Dec. 15. **Neomycin Sulfate** tablets, USP 0.5 gm., 100s, 720 bots., **Neomycin Sulfate,** USP 0.5 sterile powder, 5,640 vials; **Neomycin Sulfate Powder,** USP 5.0 gm., 4,200 vials; **Bacitracin Ointment,** USP 500 units, per gram, 3,000 tubes. Bid IFB M5-56-61, Dec. 15. **Tetracycline Hydrochloride Capsules,** USP, 250 mg. 100s, 3,840 bots., Bid IFB M5-54-61, Dec. 8. Marketing Division for Drugs and Chemicals, VA Supply Agency, Somerville, N. J.
Varnish, No. 00, pale lithographic, approx. 155,000 lbs., Bid IFB BEP-70, schedule No. 3-4, Dec. 28, Procurement Office, Bureau of Engraving and Printing, 14th & C sts., S. W. Washington 25, DC.

GLYCINE (Amino Acetic Acid) N.F.

CRYSTAL • POWDER

SOLE U. S. SELLING AGENT

for

EXPLOITATIE MAATSCHAPPIJ STORK-CHEMIE N.V.

HENGELO, HOLLAND

ROBECO CHEMICALS, INC.

25 EAST 26th ST., NEW YORK 10, N. Y.

CABLE ADDRESS "RODRUG" N. Y. ALL CODES

MURray Hill 3-7500

ETHYL ALCOHOL

Proprietary Solvents Synasol®, Anhydrol® • Completely and Specially Denatured — All Formulae 190 Proof and Anhydrous

GLYCOLS
GLYCOL ETHERS
ALIPHATIC NAPHTHAS
POLYETHYLENE GLYCOLS
ALCOHOLS
ESTERS

AMINES
KETONES
AROMATIC SOLVENTS
SURFACE ACTIVE AGENTS
CHLORINATED SOLVENTS
PLASTICIZERS

CS

CHEMICAL SOLVENTS, INC.

60 PARK PLACE, NEWARK 2, N. J.

WOrth 2-7763 (N.Y.) MArket 2-3650 (N.J.)

Aromatic Solvents

NEVILLE CHEMICAL COMPANY • Pittsburgh 25, Pa.

Manufacturers of Hydrocarbon Resins, Oils and Solvents

NEVILLE

PHOSPHORIC ACID, 85% N. F.
Tank Trucks, Drums, Carboys

PHOSPHORIC ACID, 80% F. G.
Tank Cars, Tank Trucks

PHOSPHORIC ACID, 75% F. G.
Tank Cars, Tank Trucks, Drums, Carboys

DOMESTIC and EXPORT

RN

MURRAY HILL 7-7267
RICNELCHEM, N. Y.

RICHES-NELSON, INC.

Chemicals and Allied Products

342 MADISON AVENUE, NEW YORK 17, N. Y.

European Affiliate

RICHES-NELSON S. P. R. L. 72 Ave. Brillat-Savarin, BRUXELLES, BELGIUM

Tartaric Acid, N.F.

E. M. SERGEANT
PULP & CHEMICAL CO., INC.
7 DEY STREET · NEW YORK 7, N.Y.
Established 1887

MALONONITRILE

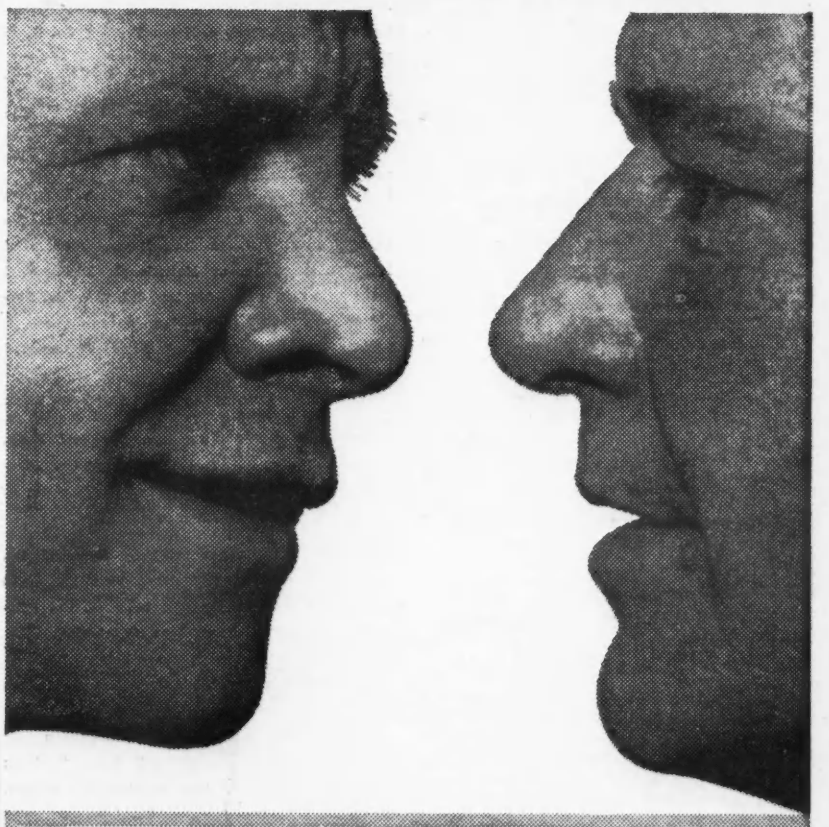
DIPHENYLACETONITRILE

MANUFACTURED BY

gamma chemical corporation
GREAT MEADOWS, N. J.

SOLE SALES AGENTS

Fisher chemical co., inc.
355 LEXINGTON AVE., NEW YORK 17, N. Y.
MURRAY HILL 2-2587
CABLE ADDRESS: PHARCHEM



"Heard about new, stabilized Celanese Formaldehyde? They ship at 15-20°F. lower than ever before. Saves heat in storage and shipment. Costs go down. Better end products, too."

Celanese®

Celanese CHEMICALS